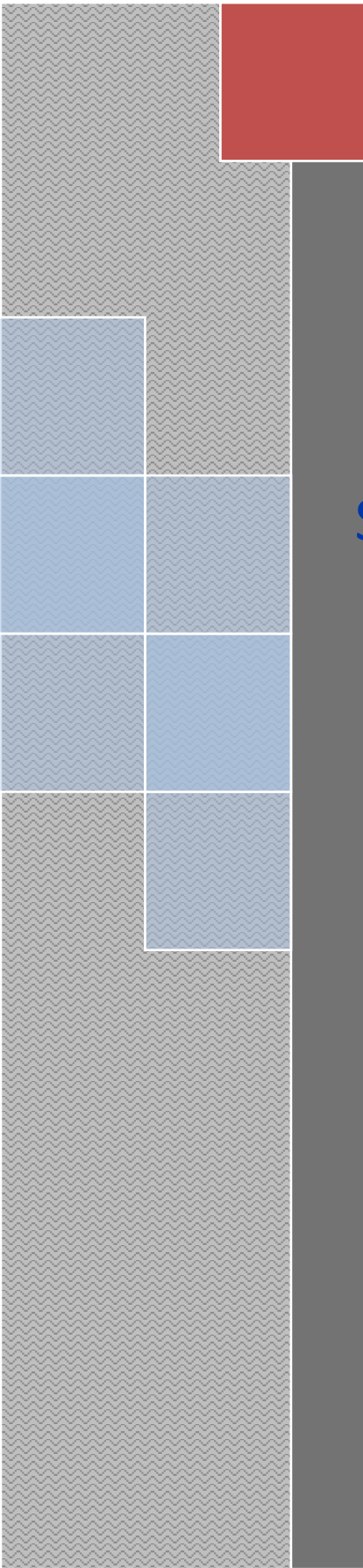




Monthly Report on Short-term Transactions of Electricity in India

January 2023



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Abbreviations

Abbreviation

ABSP_ANTP
ACBIL
ACP
ACV
ACME_SLR
ACME_RUMS
ADANI GREEN
ADANIHB_SLR
ADANI_SLR 4
ADANIHB_WIND
ADY1_PVGD
ADY2_PVGD
ADY3_PVGD
ADY6_PVGD
ADY10_PVGD
ADY13_PVGD
AGEMPL BHUJ
AHEJOL_S_FTG2
AHEJOL_W_FTG2
AHEJ2L_SOLAR
AHEJ3L_SOLAR
AHEJ4L_SOLAR
AHEJ4L_WIND
AHSP_ANTP
AKS_PVGD
AKSP_ANTP
ALFANAR_BHUJ
AMPS Hazira
APTEL
ARERJL_SLR
ARINSUM_RUMS
ARS_PVGD
ASEJTL_SLR
AVAADA1_PVGD
AVAADA2_PVGD
AVADARJHN_SLR
AYANA_NPKUNTA
AZURE_ANTP
AZURE_PVGD
AZURE_SLR
AZURE34_SLR
AZURE43_SLR
BALCO
BARC
BBMB
BETAM_TCN
BHADRAVATHI HVDC
BRBCL
CEA
CERC
CGPL
CHUKHA HEP

Expanded Version

Acme Bhiwadi Solar Power Private Limited, Anantpur
ACB (India) Limited
Area Clearing Price
Area Clearing Volume
ACME Solar Power Project
Acme Rewa Ultra Mega Solar Project
Adani Green Energy Limited
Adani Hybrid Energy Jaisalmer One Limited (Solar)
Adani Solar Energy Four Private Limited
Adani Hybrid Energy Jaisalmer One Limited (Wind)
Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 3 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 6 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 10 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
Adani Green Energy (MP) Ltd., Bhuj
Adani Hybrid Energy Jaisalmer One Limited (SOLAR)
Adani Hybrid Energy Jaisalmer One Limited (WIND)
Adani Hybrid Energy Jaisalmer Two Limited (Solar)
Adani Hybrid Energy Jaisalmer Three Limited (Solar)
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Solar
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Wind
Acme Hisar Solar Power Private Limited, Anantpur
ACME Kurukshetra Solar Energy Pvt. Ltd
Acme Karnal Solar Power Private Limited, Anantpur
Alfanar Group Wind Project, Bhuj, Gujarat
Arcelor Mittal Nippon Steel, Hazira
Appellate Tribunal for Electricity
Adani Renewable Energy Park Rajasthan Ltd.
Solenergi Rewa Ultra Mega Solar Project
ACME REWARI Solar Power Pvt Ltd.
Adani Solar Energy Jodhpur Two Ltd.
Avaada Solar Energy Private Ltd., Pavagada Project 1
Avaada Solar Energy Private Ltd., Pavagada Project 2
Avaada Rjhn Private Limited_Solar
Ayana Power, NP Kunta
Azure Power, Anantpur
Azure Power, Pavagada
Azure Power Solar Power Project
Azure Power 34 Pvt. Ltd. Solar Power Project
Azure Power Forty Three Private Limited
Bharat Aluminum Company Limited
Bhabha Atomic Research Centre
Bhakra Beas Management Board
Betam Wind Energy Private Limited, Tuticorin
Bhadravathi High Voltage Direct Current Link
Bhartiya Rail Bijlee Company Limited
Central Electricity Authority
Central Electricity Regulatory Commission
Coastal Gujarat Power Limited
Chhukha Hydroelectric Project, Bhutan

CHUZACHEN HEP	ChuzachenHydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
CLEANSPL_SLR	Clean Solar Jodhpur Pvt Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DAM	Day Ahead Market
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DD&DNH	Daman and Diu & Dadar Nagar Haveli
DGEN MEGA POWER	DGEN Mega Power Project
DGPCL Bhutan	Druk Green Power Corporation Ltd., Bhutan
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	DoyangHydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EDEN_SLR	Eden RE Cite Private limited
EMCO	EMCO Energy Limited
ESPL_RADHANESDA	Electro Solaire Private Limited, Radhanesda
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
FORTUM1_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 1
FORTUM2_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 2
FRV_ANTP	Fotowatio Renewable Ventures, Anantapur
FRV_NPK	Fotowatio Renewable Ventures, NP Kunta
GIPCL_RADHANESDA	Gujarat Industries Power Company Ltd, Radhanesda
GIWEL_BHUJ	Green infra wind energy Limited, Bhuj
GIWEL_TCN	Green Infra Wind Energy Limited,Tuticorin
GMR CHHATTISGARH	GMR Chhattisgarh Energy Limited
GMR KAMALANGA	GMR Kamalanga Energy Ltd.
G-DAM	Green Day Ahead Market
G-TAM	Green Term Ahead Market
HPX	Hindustan Power Exchange Limited
HVDC ALPD	Alipurduar High Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	PasauliHigh Voltage Direct Current Link
HVDC RAIGARH	Raigarh-Pugalur High Voltage Direct Current Link
IEX	Indian Energy Exchange Limited
IGSTPS	Indira Gandhi Super Thermal Power Station Jhajjar
IL&FS	Infrastructure Leasing & Financial Services Limited
INOX_BHUJ	INOX Wind Limited, Bhuj, Gujarat
J&K	Jammu & Kashmir
JAYPEE NIGRIE	Jaypee Nigrie Super Thermal Power Project
JHABUA POWER MP	Jhabua Thermal Power Project
JINDAL POWER	Jindal Power Limited
JINDAL STAGE-II	Jindal Power Ltd Stage II
JITPL	Jindal India Thermal Power Ltd.
JORETHANG	Jorethang Loop Hydroelectric Power Project
JSW_RENEW_2	JSW Renew Energy Two Limited
KAPP 3&4	Kakrapar Atomic Power Station Unit 3 & 4
KARCHAM WANGTOO	Karcham Wangtoo H.E. Project
KORBA WEST POWER	Korba West Power Company Limited
KOTESHWAR	Koteshwar Hydro Power project
KREDL_PVGD	Karnataka Renewable Energy Development Ltd,Pavagada

KSK MAHANADI	KSK Mahanadi Power Ltd
KSMPL_SLR	Kilaj Solar (Maharashtra) Private Limited
KURICHU HEP	Kurichhu Hydro-electric Power Station, Bhutan
LANKO_AMK	LancoAmarkantak Power Private Limited
LANKO BUDHIL	LancoBudhil Hydro Power Private Limited
LANKOKONDAPALLY	Lanco Kondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar Project
MAHOBA_SLR	Mahoba Solar Power Project
MALANA	Malana Hydroelectric Plant
MANGDECHU HEP	Mangdechhu Hydroelectric Project, Mangdechhu River, Bhutan
Maruti Coal	Maruti Clean Coal and Power Limited
MB POWER	MB Power Ltd
MEENAKSHI	Meenakshi Energy Private Limited
MP	Madhya Pradesh
MRPL	Mahindra Renewables Private Limited
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCN	Mytrah Energy (India) Private Limited,Tuticorin
MU	Million Units
NAPP	Narora Atomic Power Plant
NCR ALLAHABAD	North Central Railway, Allahabad
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	Nepal
NFL	National Fertilisers Limited
NHPC STATIONS	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Dispatch Centre
NPGC	Nabinagar Power Generating Company (Pvt.) Limited
NSPCL	NTPC - SAIL Power Company Private Limited
NTECLVallur	NTPC Tamil Nadu Energy Company Limited Vallur
NTPC_ANTP	NTPC Anantapur
NTPC STATIONS	National Thermal Power Corporation Ltd. Stations
NTPL	NLC Tamil Nadu Power Limited
NVVN	NTPC Vidyut Vyapar Nigam Limited
ONGC Platana	ONGC Tripura Power Company
OPGC	Odisha Power Generation Corporation
ORANGE_TCN	Orange Renewable Power Pvt. Ltd,Tuticorin
OSTRO	Ostro Energy Private Limited
OTC	Over The Counter
PARAM_PVGD	Parampujya Solar Energy Private Ltd
PARE HEP	Pare hydroelectric project, Arunachal Pradesh
PX	Power Exchange
PXIL	Power Exchange India Limited
RAIL	Indian Railways
RAMPUR HEP	Rampur Hydro Electric Power Project
RANGIT HEP	Rangit Hydroelectric power project
RANGANADI HEP	Ranganadi Hydro Electric Power Project, Arunachal Pradesh
RAP-B	Rajasthan Atomic Power Plant-B
RAP-C	Rajasthan Atomic Power Plant-C
REC	Renewable Energy Certificate
REGL	Raigarh Energy Generation Limited
RENEW_BHACHAU	ReNew Power Limited, Bhachau
RENEW_BHUJ	ReNew Power Limited, Bhuj

RENEW_PVGD	ReNew Wind Energy (TN2) Private Limited
RENEW_SLR_BKN	Renew Solar Bikaner
RENEWJH_SLR	Renew Solar Energy (Jharkhand Three) Private Limited
RENEWURJA_SLR	ReNew Solar Urja Private Limited
RGPPL_IR	Ratnagiri Gas and Power Private Ltd., supply to Indian Railways
RGPPL_OTHER	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RONGNICHU HEP	Rongnichu Hydro Electric Power Project
RPREL	Raipur Energen Limited
RSTPS_FSPP	NTPC Ramagundam STPS- Floating Solar PV Project
RTC	Round The Clock
RTM	Real Time Market
SasanUMPP	Sasan Ultra Mega Power Project
SB_SLR	Soft Bank Solar
SB6_POKARAN	SB Energy Six Private Limited, Pokaran
SBG_CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited, NP Kunta
SBG_PVGD	SB Energy Solar Private Limited, Pavagada
SBSR_SLR	SBSR Power Cleantech Eleven Private Limited
SEMBCORP	Sembcorp Gayatri Power Ltd
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SESPL	Srijan Energy Systems Pvt. Ltd.
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SKRPL	Sitac Kabini Renewables Pvt. Ltd.
SPRNG_NPKUNTA	Sprng Energy, NP Kunta
SPRING_PUGALUR	Spring Solar Power Private Limited, Pugalur
TALA HEP	Tala Hydroelectric Project, Bhutan
TASHIDENG HEP	Tashiding Hydro Electric Project, Sikkim
TATA_ANTP	TATA Power Anantapur
TATA_PVGD	Tata Power Renewable Energy Ltd
TATA_SLR	Tata Solar
TEESTA STG3	Teesta Stage 3 Hydro Power Project
TEHRI	Tehri Hydro Electric Power Project
TAM	Term Ahead Market
THAR1_SLR	Thar Surya Ravi One Pvt Ltd
THERMAL POWERTECH	Thermal Powertech Corporation India Limited
TPREL_RADHANESDA	Tata Power Renewable Energy Limited, Radhanesda
VINDHYACHAL HVDC	Vindhyachal High Voltage Direct Current Link
YARROW_PVGD	Yarrow Infra Structure Private Ltd

1. Introduction

1.1. A well-functioning electricity market requires an effective market monitoring process. The monthly report on short-term transactions of electricity, published by CERC since 2008 as part of its market monitoring process, provides a snapshot of key aspects of short-term transactions of electricity in India. Here, “short-term transactions of electricity” refers to the contracts of less than one year period, for electricity transacted (inter-State) through inter-State Trading Licensees and directly by the Distribution Licensees, Power Exchanges (Indian Energy Exchange Ltd (IEX), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd (HPX)), and Deviation Settlement Mechanism (DSM). The main objectives of the report are: (i) to analyze the volume and price of the short-term transactions of electricity; (ii) to assess the competition among the market players; (iii) to analyse the effect of congestion on volume of electricity transacted through power exchanges; (iv) to provide information on volume and price of Renewable Energy Certificates (RECs) transacted through power exchanges; and (v) to disseminate all other relevant market information. The analysis of short-term transactions of electricity during the month of **January 2023** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During January 2023, total electricity generation, excluding generation from renewable and captive power plants in India was 118846.77 MU (Table-1). Of the total electricity generation, 13.81% was transacted through short-term, comprising of 6.17% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)}, followed by 6.12% through bilateral (through traders and term-ahead contracts on power exchanges, and directly between distribution companies) and 1.51% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (16409.33 MU), 44.70% was transacted through power exchanges {DAM (including G-DAM) and RTM}, followed by 44.34% through bilateral (23.76% through traders and term-ahead contracts on power exchanges, and 20.57% directly between distribution companies) and 10.96% through DSM (Table-1 & Figure-2). Daily volume of short-term transactions is shown in Table-26 & Figure-4.

2.3. Of the total volume of electricity transacted through power exchanges, 55.47% of the volume was transacted in DAM (including G-DAM), followed by 22.28% in RTM and 22.24% in Term Ahead Market (TAM) (including G-TAM) (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5. The volume of electricity transacted by the trading licensees includes bilateral transactions and the transactions undertaken through power exchanges. There were 48 trading licensees as of January 2023. Of which, 30 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Adani Enterprises Ltd., Tata Power Trading Company (P) Ltd. and Manikaran Power Ltd. had a share of 78.47% in the total volume of electricity traded by all the licensees.

2.5. Herfindahl-Hirschman Index (HHI), a commonly accepted index to calculate market concentration, has been used for measuring the competition among the trading licensees. Increase in the HHI generally indicates decrease in competition and increase of market concentration, and vice versa. The HHI below 0.15 indicates non-concentration, HHI between 0.15 and 0.25 indicates moderate concentration and HHI above 0.25 indicates high concentration. The HHI has been computed based on the volume of electricity traded (inter-State & intra-State) by inter-State trading licensees, and it was 0.1932 for the month of January 2023, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX and PXIL was 4947.96 MU and 0.12 MU respectively. No electricity was transacted through DAM of HPX. The volume of total buy bids and sell bids was 8920.22 MU and 8651.31 MU respectively in IEX, while the same was 10.72 MU and 73.31 MU respectively in PXIL. No bids were received in HPX.

2.7. Of the total volume of electricity transacted in the DAM of IEX, the volume purchased by the neighboring countries of India was 320.80 MU, while no volume was sold, under the Cross Border Trade of electricity through power exchange (Table-31). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.8. The volume of electricity transacted in the G-DAM of IEX was 285.15 MU, while no electricity was transacted in the G-DAM of PXIL and HPX. The volume of total buy bids and

sell bids was 1406.03 MU and 360.23 MU respectively in IEX, while no bids were received in PXIL and HPX.

2.9. The volume of electricity transacted in the RTM of IEX was 2101.88 MU, while no electricity was transacted in the RTM of PXIL and HPX. The volume of total buy bids and sell bids was 3890.65 and 3366.66 MU respectively in IEX. The volume of total buy bids and sell bids was 2.20 MU and 5.80 MU respectively in PXIL. No bids were received in HPX. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.10. The volume of electricity transacted in the TAM of IEX, PXIL and HPX was 902.29 MU, 661.10 MU and 410.30 MU respectively (Table-8, Table-9 & Table-10). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX, PXIL and HPX was 61.34 MU, 44.84 MU and 18.61 MU respectively (Table-11, Table-12 & Table-13).

3. Price of Short-term Transactions of Electricity

3.1. **Price of electricity transacted through Traders:** The minimum, maximum and weighted average sale prices for the electricity transacted through traders were ₹2.70/kWh, ₹7.95/kWh and ₹5.08/kWh respectively (Table-3). The weighted average sale prices were also computed for the electricity transacted during Round the Clock (RTC) and Off-peak periods separately, and the sale prices were ₹5.44/kWh and ₹3.43/kWh respectively. No electricity was transacted through traders during Peak periods (Table-4).

3.2. **Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices for the electricity transacted in the DAM of IEX were ₹2.00/kWh, ₹12.00/kWh and ₹6.36/kWh respectively and the same were ₹9.90/kWh, ₹12.00/kWh and ₹11.33/kWh respectively in DAM of PXIL (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹2.86/kWh, ₹12.00/kWh and ₹6.30/kWh respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.49/kWh, ₹12.00/kWh and ₹6.26/kWh respectively (Table-7). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.93/kWh, ₹7.54/kWh and ₹8.69/kWh respectively (Table-8, Table-9 and Table-10). The weighted average price of electricity transacted in the G-

TAM of IEX, PXIL and HPX was ₹6.95/kWh, ₹5.99/kWh and ₹7.38/kWh respectively (Table-11, Table-12 and Table-13). No electricity was transacted in G-DAM & RTM of PXIL and in DAM, G-DAM, RTM of HPX.

3.3. **Price of electricity transacted through DSM:** The minimum, maximum and average price of DSM was ₹2.00/kWh, ₹12.00/kWh and ₹6.76/kWh respectively (Table-14).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees, power exchanges & average price of DSM are shown in Figure-6. The daily prices of electricity transacted through power exchanges & DSM and their comparison are shown in Table-28(a), (b) & (c) and Figure-7.

4. Trading Margin

4.1. As per the CERC (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations 2020, the trading licensees are allowed to charge trading margin of not less than 0 paise/kWh and upto 7 paise/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.033/kWh.

5. Volume of Short-term Transactions of Electricity (Regional Entity¹-Wise)

5.1. Of the total bilateral transactions, top 5 regional entities/states sold 45.14% of the volume. These were Punjab, Uttar Pradesh, Jindal Power Ltd Stage II, Raipur Energen Limited and Haryana (Table-15). Top 5 regional entities/states purchased 53.65% of the volume, and these were Madhya Pradesh, Maharashtra, Telangana, Rajasthan and Himachal Pradesh (Table-16).

5.2. Of the total DAM transactions at power exchanges, top 5 regional entities/states sold 52.05% of the volume, and these were Uttar Pradesh, West Bengal, Bihar, Chhattisgarh and Jaypee Nigrie Super Thermal Power Project (Table-17). Top 5 regional entities/states purchased 54.13% of the volume, and these were Gujarat, Jammu & Kashmir, Andhra Pradesh, Maharashtra and Punjab (Table-18).

¹ In case of a State, the entities which are “selling” also include generators connected to State Grid and the entities which are “buying” also include open access consumers.

5.3. Of the total G-DAM transactions at power exchanges, top 5 regional entities/states sold 88.39% of the volume, and these were Karnataka, Adani Wind Energy, Jammu & Kashmir, NTPC Stations (Southern Region) and Andhra Pradesh (Table-19). Top 5 regional entities/states purchased 71.40% of the volume, and these were Maharashtra, Damodar Valley Corporation, Punjab, Daman and Diu & Dadar Nagar Haveli and Karnataka (Table-20).

5.4. Of the total RTM transactions at power exchanges, top 5 regional entities/states sold 52.56% of the volume, and these were Bihar, Madhya Pradesh, West Bengal, Uttar Pradesh and Odisha (Table-21). Top 5 regional entities/states purchased 55.33% of the volume, and these were Punjab, Rajasthan, Telangana, Maharashtra and Gujarat (Table-22).

5.5. Of the total under drawal in January 2023, top 5 regional entities/states under drew 29.63% of the volume, and these were Madhya Pradesh, Gujarat, Rajasthan, Uttar Pradesh and Maharashtra (Table-23). Top 5 regional entities/states overdrew 24.49% of the total over drawal volume, and these were NTPC Stations (Northern Region), Odisha, NTPC Stations (Western Region), Uttar Pradesh and Gujarat (Table-24).

5.6. The total volume of net short-term transactions of electricity (Regional entity-wise), i.e., volume of net transactions through bilateral, power exchanges and DSM are shown in Table-25 & 29. Top 5 electricity selling regional entities/states were Uttar Pradesh, Bihar, West Bengal, Jindal Power Ltd Stage II and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Gujarat, Rajasthan, Maharashtra, Andhra Pradesh and Telangana.

6. Congestion² on Inter-State Transmission Corridor for Day-Ahead Market and Real Time Market on Power Exchanges

6.1. Power exchanges use a price discovery mechanism in which the aggregate demand and supply are matched to arrive at an unconstrained market price and volume. This process assumes that there is no congestion in the inter-State transmission system between different regions. However, in reality, the system operator (NLDC) in coordination with RLDCs limits

² “Congestion” means a situation where the demand for transmission capacity exceeds the available transfer capability

the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”³.

6.2. The volume of electricity that could not be cleared due to congestion & other reasons and could not be transacted through power exchanges is the difference between unconstrained cleared volume and actual cleared volume. During the month of January 2023, no congestion was experienced in any of the power exchanges (Table-26).

7. Volume and Price of Renewable Energy Certificates (RECs)

7.1. The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between availability of renewable energy and the requirement of the obligated entities to meet their renewable purchase obligation by purchasing green attributes of renewable energy remotely located, in the form of RECs. The REC mechanism is a market based instrument, to promote renewable sources of energy and development of electricity market.

7.2. One REC is equivalent to 1 MWh electricity injected into the grid from renewable energy sources. The REC is exchanged only in the power exchanges approved by CERC within the band of a floor price and forbearance (ceiling) price as notified by CERC from time to time. The first REC trading was held on power exchanges in May, 2011.

7.3. The categorization of RECs has been dispensed with, on introduction of the concept of multiplier under the CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022, brought into effect from 05.12.2022. Accordingly, the power exchanges deactivated the Solar and Non-Solar REC contract for trading w.e.f. December 2022. A new contract named “REC” has been made available for trading.

³“Market Splitting” is a mechanism adopted by Power Exchanges, where the market is split in the event of transmission congestion, into predetermined (by NLDC) bid areas or zones, which are cleared individually at their respective area prices such that the energy balance in every bid area is reached based upon the demand and supply in individual bid areas and using the available transmission corridor capacity between various bid areas simultaneously. As a result of this market splitting the price of electricity in the importing region, where demand for electricity is more than supply, becomes relatively higher than the price of electricity in the exporting region.

7.4. The details of REC transactions for the month of January 2023 are shown in Table-30. The market clearing volume of RECs transacted on IEX, PXIL and HPX were 394791, 94520 and 1250 respectively. The weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX.

7.5. The gap between the volume of buy and sell bids of RECs placed through power exchanges shows the variation in demand for the RECs. The ratio of buy bids to sell bids was 0.18, 0.14 and 0.99 in IEX, PXIL and HPX respectively.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 13.81%.
- b) Of the total short-term transactions (16409.33 MU), 44.70% was transacted through power exchanges {DAM (including G-DAM) and RTM}, followed by 44.34% through bilateral (23.76% through traders and term-ahead contracts on power exchanges, and 20.57% directly between distribution companies) and 10.96% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 55.47% of the volume was transacted in DAM (including G-DAM), followed by 22.28% in RTM and 22.24% in Term Ahead Market (TAM) (including G-TAM).
- d) Top 5 trading licensees had a share of 78.47% in the total volume traded by all the trading licensees.
- e) The Herfindahl Hirschman Index computed for the volume of electricity traded by trading licensees was 0.1932, indicating moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹5.08/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX and PXIL was ₹6.36/kWh and ₹11.33/kWh, while no electricity was transacted in DAM of HPX. The weighted average price of electricity transacted in G-DAM of IEX was ₹6.30/kWh, while no electricity was transacted in G-DAM of PXIL and HPX. The weighted average price

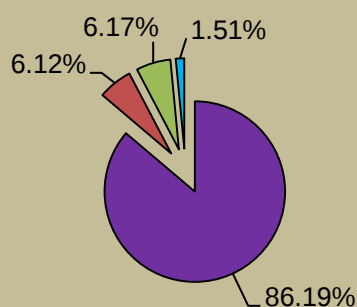
of electricity transacted in RTM of IEX was ₹6.26/kWh. No electricity was transacted in the RTM of PXIL and HPX.

- h) The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.93/kWh, ₹7.54/kWh and ₹8.69/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX, PXIL and HPX was ₹6.95/kWh, ₹5.99/kWh and ₹7.38/kWh respectively.
- i) The average price of electricity transacted through DSM was ₹6.76/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.033/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were Uttar Pradesh, Bihar, West Bengal, Jindal Power Ltd Stage II and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Gujarat, Rajasthan, Maharashtra, Andhra Pradesh and Telangana.
- l) During the month of January 2023, no congestion was experienced in any of the power exchanges.
- m) The market clearing volume of RECs transacted on IEX, PXIL and HPX were 394791, 94520 and 1250 respectively. The weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), JANUARY 2023				
Sr. No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	7275.68	44.34	6.12
	(i) Through Traders and PXs	3899.57	23.76	3.28
	(ii) Direct	3376.11	20.57	2.84
2	Through Power Exchanges	7335.12	44.70	6.17
	(i) IEX			
	(a) DAM	4947.96	30.15	4.16
	(b) RTM	2101.88	12.81	1.77
	(c) GDAM	285.15	1.74	0.24
	(ii) PXIL			
	(a) DAM	0.12	0.00	0.00
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
	(ii) HPX			
	(a) DAM	0.00	0.00	0.00
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	1798.53	10.96	1.51
	Total Short-term transactions	16409.33	-	13.81
	Total Generation	118846.77	-	-

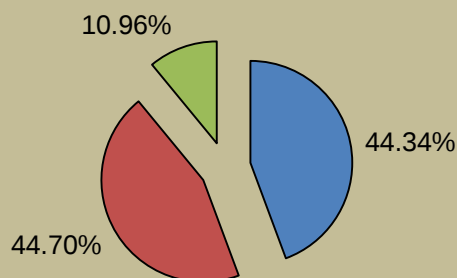
Source: NLDC

Figure-1: Volume of various kinds of Electricity Transactions in Total Electricity Generation, January 2023



■ Long-term ■ Bilateral ■ Through Power Exchanges ■ Through DSM

Figure-2: Volume of Short-term Transactions of Electricity, January 2023



■ Bilateral ■ Power Exchanges ■ DSM

Figure-3: Volume transacted in different markets segments on Power Exchanges, January 2023

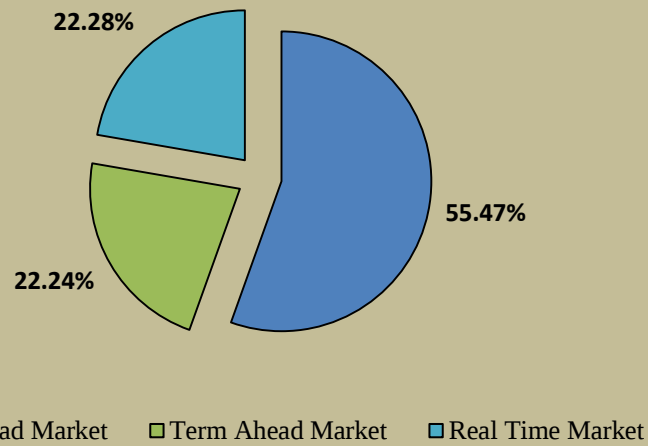


Figure-4: Volume of Short-term Transactions of Electricity, January 2023 (Day-wise)

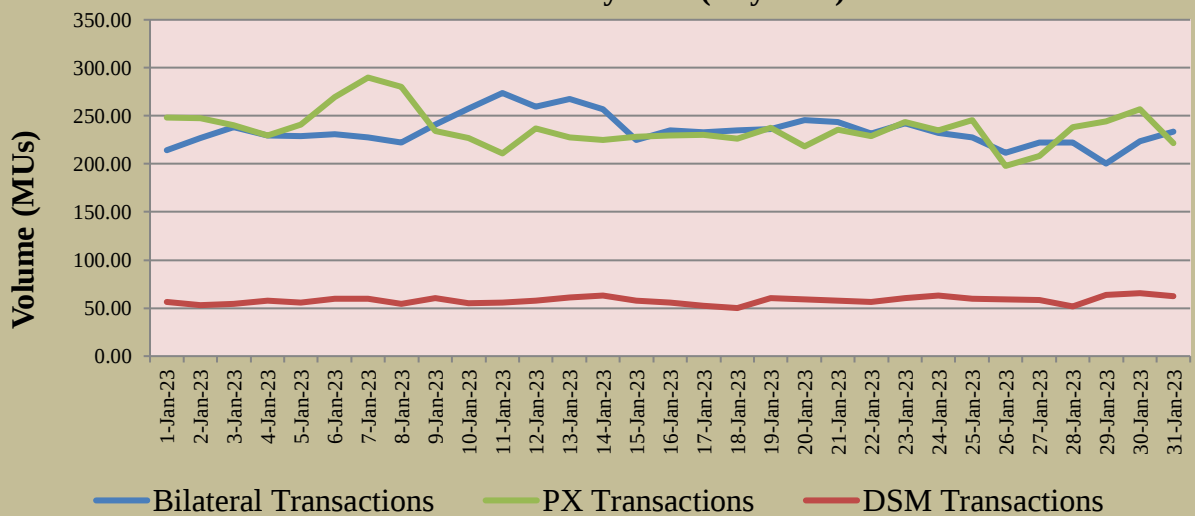


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JANUARY 2023			
Sr. No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	35.18	0.1238
2	NTPC Vidyut Vyapar Nigam Ltd.	21.78	0.0475
3	Adani Enterprises Ltd.	8.17	0.0067
4	Tata Power Trading Company (P) Ltd.	6.98	0.0049
5	Manikaran Power Ltd.	6.35	0.0040
6	Arunachal Pradesh Power Corporation (P) Ltd	5.71	0.0033
7	Ambitious Power Trading Company Ltd.	3.39	0.0012
8	GMR Energy Trading Ltd.	3.06	0.0009
9	Shubheksha Advisors Pvt. Ltd.	2.11	0.0004
10	Kreate Energy (I) Pvt. Ltd.	1.26	0.0002
11	JSW Power Trading Company Ltd	1.01	0.0001
12	Instinct Infra & Power Ltd.	0.98	0.0001
13	Abja Power Private Limited	0.84	0.0001
14	RPG Power Trading Company Ltd.	0.76	0.0001
15	NTPC Ltd.	0.71	0.0000
16	Gita Power & Infrastructure Private Limited	0.30	0.0000
17	Saranyu Power Trading Private Limited	0.30	0.0000
18	Greenko Energies Pvt Ltd	0.22	0.0000
19	Statkraft Markets Pvt. Ltd.	0.21	0.0000
20	NLC India Ltd.	0.16	0.0000
21	Shree Cement Ltd.	0.14	0.0000
22	Instant Venture Pvt. Ltd.	0.13	0.0000
23	Knowledge Infrastructure Systems (P) Ltd	0.08	0.0000
24	Kundan International Pvt. Ltd.	0.07	0.0000
25	Customized Energy Solutions India (P) Ltd.	0.05	0.0000
26	Powerfull Energy Trading Pvt. Ltd.	0.02	0.0000
27	Phillip Commodities India (P) Ltd.	0.01	0.0000
28	Ideal Energy Solution Pvt. Ltd.	0.01	0.0000
29	Saini Power Transactor	0.01	0.0000
30	Altium Energie Private Limited	0.001	0.0000
TOTAL		100.00%	0.1932
Top 5 trading licensees		78.47%	
Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.			
Note 2: Volume of electricity transacted by Global Energy Ltd. is not included.			
Source: Information submitted by trading licensees			

Figure 5: Percentage Share of Electricity Transacted by Trading Licensees, January 2023

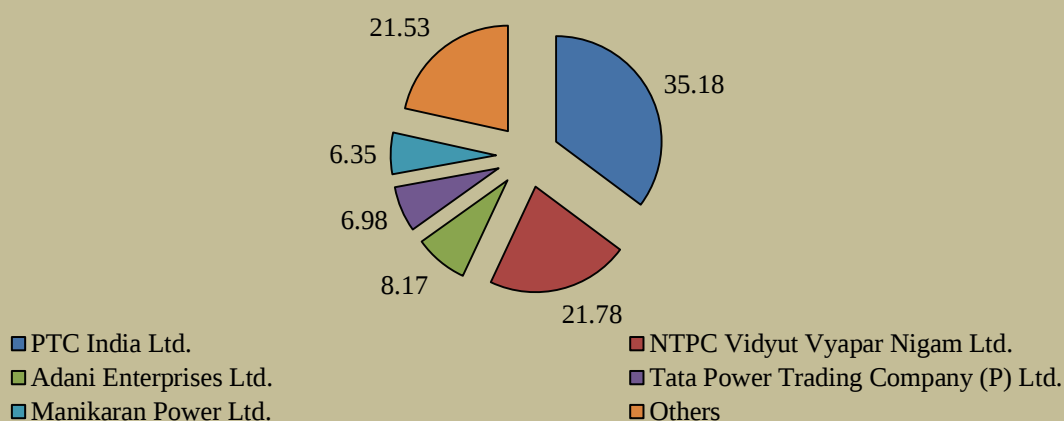


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JANUARY 2023		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.70
2	Maximum	7.95
3	Weighted Average	5.08

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JANUARY 2023		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	5.44
2	PEAK	-
3	OFF PEAK	3.43

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	2.00	9.90	-
2	Maximum	12.00	12.00	-
3	Weighted Average	6.36	11.33	-

Source: IEX, PXIL and HPX

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	2.86	-	-
2	Maximum	12.00	-	-
3	Weighted Average	6.30	-	-

Source: IEX, PXIL and HPX

Table-7: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JANUARY 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	0.49	-	-
2	Maximum	12.00	-	-
3	Weighted Average	6.26	-	-

Source: IEX, PXIL and HPX

Table-8: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JANUARY 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.84	12.00
2	Day Ahead Contingency Contracts	502.59	7.60
3	Daily Contracts	90.00	5.19
4	Weekly Contracts	105.60	6.22
5	Monthly Contracts	37.20	4.80
6	Any Day Single Sided Contracts	166.07	6.74
	Total	902.29	6.93

Source: IEX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JANUARY 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	5.13	10.93
2	Day Ahead Contingency Contracts	522.38	7.81
3	Daily Contracts	100.80	5.24
4	Weekly Contracts	16.80	7.53
5	Any Day Single Sided Contracts	16.00	11.84
	Total	661.10	7.54

Source: PXIL

Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, JANUARY 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.40	12.00
2	Day Ahead Contingency Contracts	358.49	8.91
3	Weekly Contracts	50.40	7.02
	Total	410.30	8.69

Source: HPX

Table-11: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, JANUARY 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	55.78	7.07
2	Daily Contracts	5.57	5.73
	Total	61.34	6.95

Source: IEX

Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, JANUARY 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	44.84	5.99
	Total	44.84	5.99

Source: PXIL

Table-13: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF HPX, JANUARY 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	18.61	7.38
	Total	18.61	7.38

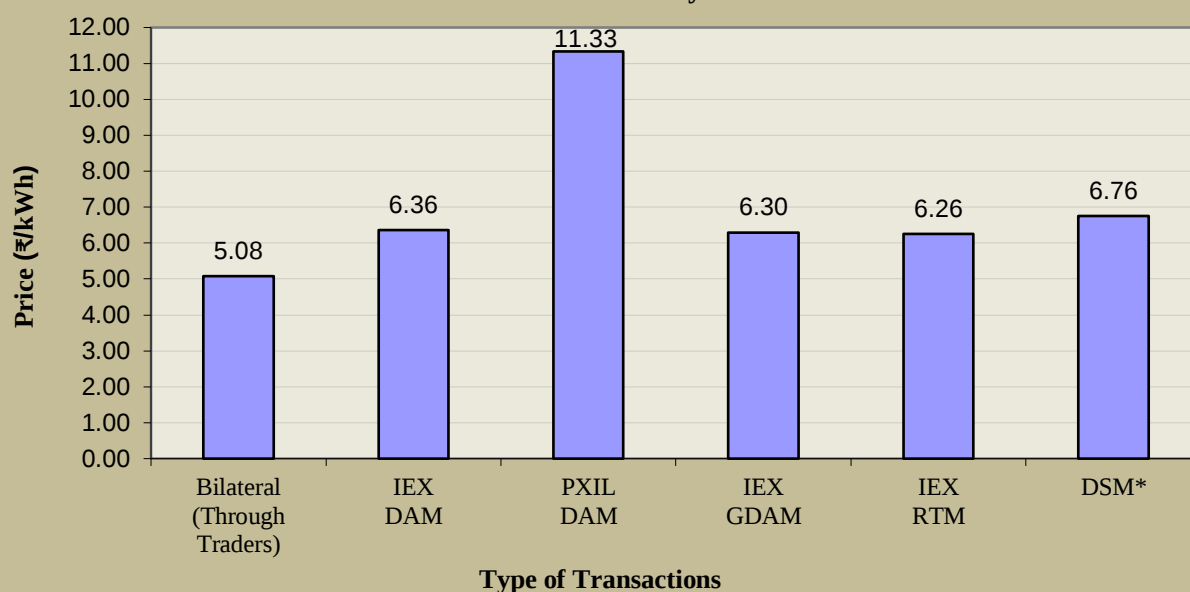
Source: HPX

Table-14: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, JANUARY 2023		
Sr. No	Item	Price in All India Grid (₹/kWh)
1	Minimum	2.00
2	Maximum	12.00
3	Average	6.76

Source: NLDC

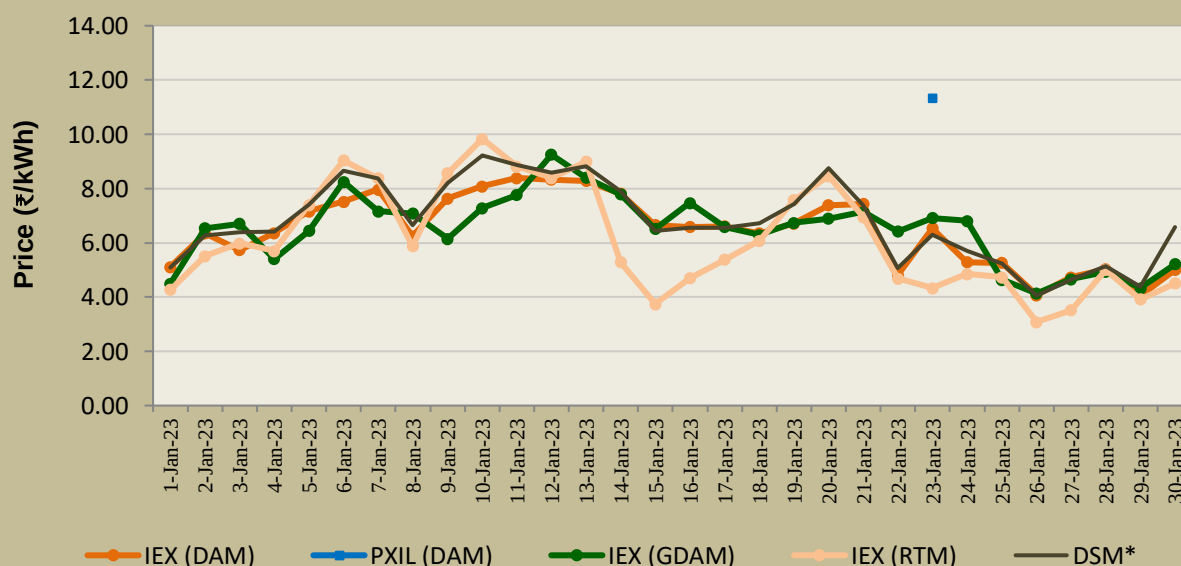
Note: The CERC DSM Regulations 2022 came into effect from 05.12.2022, wherein normal rate of charges for deviation for a time block is equal to the highest of the [weighted average Area Clearing Price (ACP) of the Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of the Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary Service Charge of all the regions]. Thereafter a ceiling of Rs. 12/kWh was imposed by CERC from 28.12.2022

Figure-6: Weighted Average Price of Short-term Transactions of Electricity, January 2023



Note: No electricity was transacted in G-DAM & RTM of PXIL and in DAM, G-DAM & RTM of HPX during January 2023
*** Simple average price of DSM of the month**

Figure-7: Weighted Average Price of Short-term Transactions of Electricity, January 2023 (Day-wise)



Note: On PXIL, transactions were recorded in DAM only on 23rd January 2023. No electricity was transacted in G-DAM & RTM of PXIL and in DAM, G-DAM & RTM of HPX during January 2023.

*** Simple average price of DSM for each day of the month**

Table-15: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, JANUARY 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
PUNJAB	1231.36	16.92
UTTAR PRADESH	731.75	10.06
JINDAL STAGE-II	597.52	8.21
RPREL	414.61	5.70
HARYANA	308.76	4.24
DELHI	305.83	4.20
JINDAL POWER	303.22	4.17
JITPL	193.63	2.66
RKM POWER	191.57	2.63
ADHUNIK POWER LTD	164.93	2.27
KARNATAKA	148.53	2.04
CHHATTISGARH	145.85	2.00
AHEJ4L_WIND	131.00	1.80
ESSAR POWER	130.23	1.79
SKS POWER	126.06	1.73
AHEJ4L_SOLAR	125.42	1.72
WEST BENGAL	118.20	1.62
MP	110.22	1.51
TELANGANA	108.33	1.49
MB POWER	98.31	1.35
TAMIL NADU	96.35	1.32
ODISHA	91.84	1.26
DVC	89.78	1.23
SEBPCORP	86.62	1.19
RAJASTHAN	83.38	1.15
TEESTA STG3	83.22	1.14
SHREE CEMENT	79.17	1.09
KOLYAT_SLR	78.07	1.07
ABC_BHDL2	63.63	0.87
NTPC STATIONS-NR	63.60	0.87
GMR KAMALANGA	61.44	0.84
AVAADASN_SLR	59.40	0.82
MAHARASHTRA	51.93	0.71
ACME_HEERGARH	46.97	0.65
JAYPEE NIGRIE	46.76	0.64
THAR1_SLR	41.86	0.58
TATA_GREEN	41.83	0.57
GUJARAT	41.74	0.57
J & K	41.14	0.57
DB POWER	40.64	0.56
ACBIL	32.91	0.45
TATA_SLR	31.96	0.44
NEEPCO STATIONS	31.47	0.43
BIHAR	24.33	0.33
RENEW_SR_SLR	19.42	0.27
HIMACHAL PRADESH	18.51	0.25
DAGACHU	16.06	0.22
TRN ENERGY	14.88	0.20
SINGOLI BHATWARI HEP	11.78	0.16
AD HYDRO	11.68	0.16
JSW_RENEW_2	10.67	0.15
LANKO_AMK	10.16	0.14
NTPC STATIONS-SR	8.56	0.12
BALCO	6.80	0.09
DIKCHU HEP	6.24	0.09

UTTARAKHAND	5.87	0.08
SB_SLR	5.48	0.08
ANDHRA PRADESH	5.20	0.07
SORANG HEP	4.90	0.07
ARUNACHAL PRADESH	4.74	0.07
KARCHAM WANGTOO	4.36	0.06
ONGC PALATANA	3.92	0.05
ADANI_WIND	2.13	0.03
TASHIDENG HEP	2.01	0.03
JORETHANG	1.42	0.02
NTPC STATIONS-WR	1.28	0.02
JHABUA POWER_MP	0.96	0.01
SIKKIM	0.92	0.01
SAINJ HEP	0.81	0.01
OSTRO	0.71	0.01
GOA	0.65	0.01
MEGHALAYA	0.18	0.002
Total	7275.68	100.00
Volume Sold by top 5 Regional Entities	3284.00	45.14

Table-16: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, JANUARY 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
MP	1214.47	16.69
MAHARASHTRA	757.39	10.41
TELANGANA	669.46	9.20
RAJASTHAN	653.97	8.99
HIMACHAL PRADESH	608.22	8.36
ANDHRA PRADESH	501.34	6.89
UTTARAKHAND	368.38	5.06
GUJARAT	357.64	4.92
TAMIL NADU	273.63	3.76
AMPS Hazira	226.79	3.12
HARYANA	175.08	2.41
KERALA	160.00	2.20
DELHI	153.62	2.11
UTTAR PRADESH	153.27	2.11
JHARKHAND	140.50	1.93
ODISHA	125.29	1.72
MEGHALAYA	115.32	1.59
CHHATTISGARH	106.31	1.46
KARNATAKA	105.40	1.45
J & K	90.51	1.24
PUNJAB	57.46	0.79
SIKKIM	52.38	0.72
DD&DNH	48.33	0.66
MANIPUR	32.07	0.44
GOA	30.40	0.42
BALCO	29.26	0.40
WEST BENGAL	24.36	0.33
ARUNACHAL PRADESH	22.32	0.31
PONDICHERRY	21.21	0.29
MIZORAM	1.11	0.02
ASSAM	0.20	0.003
TOTAL	7275.68	100.00
Volume Purchased by top 5 Regional Entities	3903.50	53.65

Table-17: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
UTTAR PRADESH	921.31	18.62
WEST BENGAL	620.72	12.54
BIHAR	590.75	11.94
CHHATTISGARH	233.62	4.72
JAYPEE NIGRIE	208.95	4.22
ODISHA	162.58	3.29
RPREL	158.48	3.20
SEBPCORP	153.99	3.11
JITPL	150.22	3.04
MAHARASHTRA	145.69	2.94
JINDAL STAGE-II	131.57	2.66
DB POWER	130.27	2.63
DELHI	124.54	2.52
MP	107.51	2.17
KARNATAKA	94.00	1.90
TAMIL NADU	76.93	1.55
ASSAM	75.76	1.53
GUJARAT	68.05	1.38
JINDAL POWER	66.48	1.34
ESSAR POWER	65.13	1.32
TRIPURA	48.46	0.98
RKM POWER	41.99	0.85
ACBIL	40.64	0.82
GOA	37.99	0.77
KERALA	31.48	0.64
JHABUA POWER_MP	30.26	0.61
MARUTI COAL	29.89	0.60
DCPP	26.59	0.54
SKS POWER	23.70	0.48
TELANGANA	23.63	0.48
RAJASTHAN	23.61	0.48
JHARKHAND	23.23	0.47
ANDHRA PRADESH	22.47	0.45
SIMHAPURI	22.16	0.45
MB POWER	19.47	0.39
TEESTA HEP	18.14	0.37
SHREE CEMENT	14.55	0.29
HARYANA	13.18	0.27
UTTARAKHAND	12.96	0.26
DVC	12.82	0.26
ADHUNIK POWER LTD	11.96	0.24
EMCO	10.86	0.22
ASEJTL_SLR	10.64	0.21
NTPC STATIONS-SR	10.61	0.21
SAINJ HEP	9.45	0.19
J & K	8.55	0.17
KARCHAM WANGTOO	8.10	0.16
RENEW_SR_SLR	7.69	0.16
BALCO	7.36	0.15
ARUNACHAL PRADESH	7.06	0.14
REGL	6.97	0.14
CHANDIGARH	6.96	0.14
SIKKIM	5.70	0.12
HIMACHAL PRADESH	5.02	0.10

ADANI_WIND	3.59	0.07
NTPC STATIONS-NER	3.37	0.07
SORANG HEP	2.96	0.06
OSTRO	2.77	0.06
AD HYDRO	2.76	0.06
NAGALAND	2.27	0.05
DIKCHU HEP	1.87	0.04
CHUZACHEN HEP	0.95	0.02
DHARIWAL POWER	0.94	0.02
NHPC STATIONS	0.93	0.02
OSTRO Hiriyur	0.91	0.02
MIZORAM	0.77	0.02
LANCO BUDHIL	0.68	0.01
NEEPCO STATIONS	0.66	0.01
SB_SLR	0.50	0.01
CGPL	0.48	0.01
MEGHALAYA	0.38	0.01
JORETHANG	0.25	0.01
TASHIDENG HEP	0.25	0.005
GMR KAMALANGA	0.07	0.001
PUNJAB	0.04	0.001
Total	4948.08	100.00
Volume sold by top 5 Regional Entities	2575.35	52.05

Table-18: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	889.98	17.99
J & K	526.80	10.65
ANDHRA PRADESH	506.16	10.23
MAHARASHTRA	379.19	7.66
PUNJAB	376.06	7.60
RAJASTHAN	355.42	7.18
TELANGANA	349.85	7.07
UTTAR PRADESH	254.18	5.14
TAMIL NADU	229.63	4.64
NEPAL(NVVN)	194.65	3.93
HARYANA	151.44	3.06
DD&DNH	91.81	1.86
UTTARAKHAND	88.33	1.79
DGPCL Bhutan	88.01	1.78
AMPS Hazira	62.67	1.27
WEST BENGAL	59.48	1.20
DELHI	52.62	1.06
KERALA	45.35	0.92
ODISHA	40.98	0.83
KARNATAKA	40.59	0.82
NEP	38.14	0.77
MP	34.65	0.70
ASSAM	30.01	0.61
JHARKHAND	25.45	0.51
CHHATTISGARH	11.98	0.24
CHANDIGARH	10.15	0.21
GOA	4.73	0.10
NCR ALLAHABAD	3.80	0.08
HIMACHAL PRADESH	2.70	0.05
IL&FS	1.31	0.03
BIHAR	0.72	0.01
DVC	0.49	0.01
MEGHALAYA	0.45	0.01
SIKKIM	0.23	0.005
BALCO	0.05	0.001
TOTAL	4948.08	100.00
Volume purchased by top 5 Regional Entities	2678.19	54.13

Table-19: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
KARNATAKA	190.64	66.86
ADANI_WIND	23.39	8.20
J & K	14.04	4.93
NTPC STATIONS-SR	12.04	4.22
ANDHRA PRADESH	11.92	4.18
OSTRO	11.33	3.97
SB_SLR	5.93	2.08
MP	5.92	2.08
OSTRO Hiriya	2.38	0.84
TELANGANA	2.34	0.82
MAHARASHTRA	2.33	0.82
RAJASTHAN	1.14	0.40
HIMACHAL PRADESH	0.89	0.31
HARYANA	0.66	0.23
SIKKIM	0.19	0.07
Total	285.15	100.00
Volume sold by top 5 Regional Entities	252.04	88.39

Table-20: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
MAHARASHTRA	71.53	25.09
DVC	40.25	14.12
PUNJAB	34.14	11.97
DD&DNH	31.99	11.22
KARNATAKA	25.67	9.00
DELHI	23.94	8.39
TAMIL NADU	19.16	6.72
ODISHA	12.20	4.28
GUJARAT	6.89	2.42
BALCO	6.50	2.28
UTTAR PRADESH	3.87	1.36
KERALA	3.35	1.17
MP	1.47	0.52
TELANGANA	1.17	0.41
JHARKHAND	0.70	0.25
ANDHRA PRADESH	0.66	0.23
NCR ALLAHABAD	0.53	0.19
HARYANA	0.49	0.17
MEGHALAYA	0.48	0.17
BIHAR	0.15	0.05
TOTAL	285.15	100.00
Volume purchased by top 5 Regional Entities	203.59	71.40

Table-21: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
BIHAR	355.24	16.90
MP	232.54	11.06
WEST BENGAL	219.75	10.45
UTTAR PRADESH	150.96	7.18
ODISHA	146.29	6.96
NTPC STATIONS-ER	98.51	4.69
DELHI	79.25	3.77
CHHATTISGARH	62.77	2.99
MAHARASHTRA	57.59	2.74
RAJASTHAN	56.87	2.71
HIMACHAL PRADESH	55.08	2.62
SEBPCORP	40.57	1.93
NEEPCO STATIONS	38.66	1.84
J & K	36.74	1.75
TELANGANA	36.73	1.75
TAMIL NADU	35.86	1.71
RKM POWER	31.79	1.51
KERALA	29.55	1.41
KARNATAKA	29.39	1.40
NTPC STATIONS-WR	24.98	1.19
ONGC PALATANA	19.47	0.93
JHABUA POWER_MP	17.02	0.81
GUJARAT	16.85	0.80
TRN ENERGY	15.28	0.73
ESSAR POWER	15.26	0.73
JINDAL STAGE-II	14.65	0.70
ANDHRA PRADESH	14.20	0.68
JHARKHAND	12.78	0.61
BALCO	11.78	0.56
DVC	10.04	0.48
SIMHAPURI	10.03	0.48
NTPC STATIONS-SR	9.61	0.46
CGPL	8.90	0.42
SASAN UMPP	8.03	0.38
ACBIL	7.99	0.38
SIKKIM	7.57	0.36
ASSAM	7.54	0.36
TRIPURA	7.32	0.35
MB POWER	7.22	0.34
HARYANA	6.93	0.33
NLC	6.48	0.31
SKS POWER	6.45	0.31
RPREL	4.74	0.23
JINDAL POWER	4.53	0.22
UTTARAKHAND	3.77	0.18
OSTRO	3.44	0.16
NTPC STATIONS-NER	3.11	0.15
MARUTI COAL	2.58	0.12
JITPL	2.44	0.12
DD&DNH	2.30	0.11
EMCO	2.11	0.10
DB POWER	1.82	0.09
MANIPUR	1.77	0.08
GOA	1.31	0.06

ADHUNIK POWER LTD	1.30	0.06
SINGOLI BHATWARI HEP	1.18	0.06
REGL	1.17	0.06
SHREE CEMENT	1.04	0.05
CHANDIGARH	0.56	0.03
ADANI_WIND	0.43	0.02
RENEW_SR_SLR	0.40	0.02
ARUNACHAL PRADESH	0.35	0.02
SORANG HEP	0.32	0.01
PUNJAB	0.20	0.01
SAINJ HEP	0.13	0.01
OSTRO Hiriyur	0.10	0.005
KARCHAM WANGTOO	0.10	0.005
JAYPEE NIGRIE	0.07	0.003
GMR KAMALANGA	0.06	0.003
TEESTA HEP	0.03	0.002
JORETHANG	0.02	0.001
LANCO BUDHIL	0.01	0.001
MEGHALAYA	0.01	0.0003
Total	2101.88	100.00
Volume sold by top 5 Regional Entities	1104.77	52.56

Table-22: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JANUARY 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	369.49	17.58
RAJASTHAN	344.21	16.38
TELANGANA	184.62	8.78
MAHARASHTRA	138.55	6.59
GUJARAT	126.04	6.00
HARYANA	121.77	5.79
ANDHRA PRADESH	119.32	5.68
TAMIL NADU	108.31	5.15
UTTAR PRADESH	103.39	4.92
J & K	83.64	3.98
ODISHA	59.06	2.81
DELHI	58.98	2.81
WEST BENGAL	56.73	2.70
UTTARAKHAND	25.01	1.19
ASSAM	22.68	1.08
AMPS Hazira	22.03	1.05
DVC	21.35	1.02
CHHATTISGARH	20.56	0.98
KARNATAKA	19.32	0.92
KERALA	18.77	0.89
HIMACHAL PRADESH	17.07	0.81
DD&DNH	13.76	0.65
MP	11.49	0.55
MANIPUR	9.36	0.45
BALCO	5.54	0.26
ESSAR POWER	2.63	0.13
CHANDIGARH	2.55	0.12
SIKKIM	2.36	0.11
JINDAL STAGE-II	2.12	0.10
BIHAR	1.85	0.09
NCR ALLAHABAD	1.78	0.08
JHARKHAND	1.69	0.08
TRIPURA	1.46	0.07
GOA	1.36	0.06
MEGHALAYA	1.35	0.06
MARUTI COAL	1.25	0.06
ARUNACHAL PRADESH	0.44	0.02
TOTAL	2101.88	100.00
Volume purchased by top 5 Regional Entities	1162.90	55.33

Table-23: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, JANUARY 2023		
Name of the Entity	Volume of Under drawal (MUs)	% of Volume
MP	139.18	8.20
GUJARAT	125.89	7.42
RAJASTHAN	84.66	4.99
UTTAR PRADESH	79.96	4.71
MAHARASHTRA	73.09	4.31
HARYANA	61.76	3.64
DELHI	61.28	3.61
J & K	61.22	3.61
TAMIL NADU	61.05	3.60
PUNJAB	60.76	3.58
KARNATAKA	55.02	3.24
NTPC STATIONS-WR	52.16	3.07
TELANGANA	47.19	2.78
ANDHRA PRADESH	37.81	2.23
SASAN UMPP	34.63	2.04
NTPC STATIONS-NR	33.19	1.96
DVC	31.79	1.87
CHHATTISGARH	27.27	1.61
UTTARAKHAND	25.76	1.52
NTPC STATIONS-ER	25.74	1.52
NHPC STATIONS	25.70	1.51
AMPS Hazira	25.02	1.47
NEPAL(NVVN)	14.30	0.84
NTPC STATIONS-SR	13.34	0.79
PONDICHERRY	13.08	0.77
HIMACHAL PRADESH	12.77	0.75
IGSTPS	12.01	0.71
BIHAR	10.89	0.64
NEEPCO STATIONS	9.94	0.59
JINDAL STAGE-II	9.80	0.58
NLC	9.63	0.57
LANKO_AMK	9.53	0.56
BBMB	9.17	0.54
RKM POWER	8.60	0.51
ASSAM	8.04	0.47
MEGHALAYA	7.98	0.47
JHARKHAND	7.48	0.44
JAYPEE NIGRIE	7.42	0.44
TEHRI	6.38	0.38
CHANDIGARH	6.20	0.37
TRIPURA	6.11	0.36
DB POWER	5.97	0.35
GIWEL_BHUJ	5.92	0.35
JITPL	5.88	0.35
NJPC	5.73	0.34
WEST BENGAL	5.64	0.33
KERALA	5.58	0.33
AGEMPL BHUJ	5.51	0.32
AVAADASN_SLR	5.33	0.31
MIZORAM	5.29	0.31
DD&DNH	5.13	0.30
ASEJTL_SLR	4.97	0.29
ORANGE_TCN	4.93	0.29
SBESS	4.56	0.27
RAIL	4.16	0.24
KOTESHWAR	4.13	0.24
MAITHON POWER LTD	4.09	0.24
EMCO	4.04	0.24
GIWEL_TCN	3.94	0.23
GOA	3.85	0.23

RENEW_BHUI	3.76	0.22
BARC	3.66	0.22
JINDAL POWER	3.60	0.21
BANGLADESH	3.53	0.21
AZURE43_SLR	3.40	0.20
ALFANAR_BHUI	3.40	0.20
ACBIL	3.39	0.20
SB6_POKARAN	3.18	0.19
ODISHA	3.13	0.18
BALCO	3.02	0.18
OSTRO	3.02	0.18
BETAM_TCN	2.92	0.17
RENEW_BHACHAU	2.84	0.17
SKRPL	2.83	0.17
AYANA_RP1	2.82	0.17
ABC_BHDL2	2.68	0.16
ACME_HEERGARH	2.63	0.16
CLEAN_SLR	2.59	0.15
RAMPUR HEP	2.48	0.15
BRBCL,NABINAGAR	2.44	0.14
MYTRAH_TCN	2.42	0.14
ARUNACHAL PRADESH	2.41	0.14
ADHUNIK POWER LTD	2.37	0.14
RPREL	2.36	0.14
INOX_BHUI	2.27	0.13
NPGC	2.27	0.13
OSTRO Hiriyur	2.24	0.13
NAGALAND	2.21	0.13
MANIPUR	2.18	0.13
MB POWER	2.17	0.13
NTPC STATIONS-NER	2.15	0.13
NEP	2.09	0.12
SPRING_PUGALUR	2.09	0.12
SPRNG_NPKUNTA	1.97	0.12
KSK MAHANADI	1.95	0.12
SBG_NPK	1.91	0.11
KARCHAM WANGTOO	1.88	0.11
ADY1_PVGD	1.87	0.11
TEESTA HEP	1.86	0.11
AVADARJHN_SLR	1.83	0.11
RENEW_SLR_BKN	1.79	0.11
AZURE_SLR	1.77	0.10
ONGC PALATANA	1.77	0.10
FORTUM2_PVGD	1.75	0.10
SEMBCORP	1.72	0.10
ARINSUM_RUMS	1.72	0.10
SIKKIM	1.70	0.10
SKS POWER	1.64	0.10
RENEWURJA_SLR	1.63	0.10
AVIKIRAN	1.61	0.09
SBSR_SLR	1.57	0.09
TRN ENERGY	1.54	0.09
RENEWSB	1.52	0.09
TASHIDENG HEP	1.52	0.09
NTPL	1.50	0.09
ARERJL_SLR	1.49	0.09
NSPCL	1.49	0.09
RAP C	1.48	0.09
JHABUA POWER_MP	1.47	0.09
ACME_SLR	1.45	0.09
AZURE41_SLR	1.41	0.08
TEESTA STG3	1.38	0.08
EDEN_SLR	1.37	0.08

THAR1_SLR	1.36	0.08
TATA_GREEN	1.33	0.08
FORTUM1_PVGD	1.31	0.08
CLEANSPL_SLR	1.30	0.08
AYANA_NPKUNTA	1.30	0.08
ACME_RUMS	1.29	0.08
ESSAR POWER	1.28	0.08
RENEW_SR_SLR	1.19	0.07
TATA_PVGD	1.18	0.07
AZURE34_SLR	1.18	0.07
RENEWJH_SLR	1.17	0.07
MAHINDRA_RUMS	1.16	0.07
RENEWSW_SLR	1.12	0.07
PARAM_PVGD	1.09	0.06
SESPL	1.08	0.06
SBG_PVGD	1.08	0.06
MRPL	1.05	0.06
NETCL VALLUR	1.02	0.06
JSW_RENEW_2	1.02	0.06
DHARIWAL POWER	0.97	0.06
TATA_SLR	0.96	0.06
NAPP	0.96	0.06
ESPL_RADHANESDA	0.92	0.05
NTPC_ANTP	0.91	0.05
RSTPS_FSPP	0.91	0.05
RAP B	0.89	0.05
MTPS II	0.88	0.05
KREDL_PVGD	0.86	0.05
SB_SLR	0.85	0.05
POWERICA	0.84	0.05
GRT_JPL	0.83	0.05
GSECL_Radhanesda	0.83	0.05
SORANG HEP	0.80	0.05
MSUPL_BHDL2	0.79	0.05
GIPCL_RADHANESDA	0.77	0.05
CGPL	0.76	0.04
AZURE_MAPLE_SLR	0.74	0.04
AZURE_PVGD	0.67	0.04
TPREL_RADHANESDA	0.66	0.04
THERMAL POWERTECH	0.58	0.03
RANGANADI HEP	0.50	0.03
SHREE CEMENT	0.41	0.02
GMR KAMALANGA	0.41	0.02
PARE HEP	0.39	0.02
SAINJ HEP	0.37	0.02
AVAADA1_PVGD	0.36	0.02
RENEW_SLR	0.34	0.02
DIKCHU HEP	0.34	0.02
LANCO BUDHIL	0.30	0.02
ABSP_ANTP	0.29	0.02
AVAADA2_PVGD	0.28	0.02
ARS_PVGD	0.27	0.02
TATA_ANTP	0.27	0.02
ADANI GREEN	0.26	0.02
JORETHANG	0.25	0.01
AHSP_ANTP	0.25	0.01
VINDHYACHAL HVDC	0.24	0.01
AKSP_ANTP	0.24	0.01
DOYANG HEP	0.24	0.01
YARROW_PVGD	0.24	0.01
DCPP	0.23	0.01
FRV_NPK	0.23	0.01
KSMPL_SLR	0.22	0.01

RONGNICHU HEP	0.22	0.01
AKS_PVGD	0.21	0.01
AD HYDRO	0.21	0.01
FRV_ANTP	0.20	0.01
CHUZACHEN HEP	0.20	0.01
AZURE_ANTP	0.20	0.01
SINGOLI BHATWARI HEP	0.19	0.01
NFF	0.18	0.01
LOKTAK	0.16	0.01
HVDC CHAMPA	0.14	0.01
RANGIT HEP	0.14	0.01
DAGACHU	0.11	0.01
RENEW_PVGD	0.11	0.01
HVDC RAIGARH	0.08	0.004
HVDC PUS	0.05	0.003
RGPPL	0.04	0.002
BHADRAVATHI HVDC	0.03	0.002
COASTGEN	0.02	0.001
HVDC ALPD	0.02	0.001
SIMHAPURI	0.02	0.001
IL&FS	0.01	0.0004
Total	1696.96	100.00
Volume Exported by top 5 Regional Entities	502.78	29.63

Table-24: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, JANUARY 2023		
Name of the Entity	Volume of Over drawal (MUs)	% of Volume
NTPC STATIONS-NR	120.16	6.32
ODISHA	101.40	5.34
NTPC STATIONS-WR	99.83	5.25
UTTAR PRADESH	76.95	4.05
GUJARAT	67.08	3.53
RAJASTHAN	62.71	3.30
BIHAR	61.29	3.23
NTPC STATIONS-SR	56.90	2.99
NTPC STATIONS-ER	55.64	2.93
MAHARASHTRA	55.58	2.93
WEST BENGAL	55.53	2.92
TELANGANA	48.80	2.57
KARNATAKA	47.99	2.53
TAMIL NADU	46.00	2.42
AGEMPL BHUJ	30.04	1.58
HARYANA	28.93	1.52
ANDHRA PRADESH	28.13	1.48
JHARKHAND	27.49	1.45
HIMACHAL PRADESH	27.48	1.45
PUNJAB	26.16	1.38
UTTARAKHAND	25.30	1.33
CHHATTISGARH	25.22	1.33
GIWEL_BHUJ	25.21	1.33
AMPS Hazira	19.48	1.03
MP	18.53	0.98
IGSTPS	18.43	0.97
NLC	17.15	0.90
DVC	16.49	0.87
SBESS	14.88	0.78
ALFANAR_BHUJ	14.74	0.78
OSTRO	14.68	0.77
RENEW_BHUJ	14.64	0.77
AVAADASN_SLR	14.18	0.75
OSTRO Hiriyur	12.77	0.67
RENEW_BHACHAU	12.50	0.66
ASSAM	12.43	0.65
AVADARJHN_SLR	11.95	0.63
INOX_BHUJ	11.35	0.60
GIWEL_TCN	11.27	0.59
SPRING_PUGALUR	10.06	0.53
AZURE43_SLR	9.74	0.51
SKRPL	9.51	0.50
MYTRAH_TCN	9.45	0.50
KERALA	9.32	0.49
BETAM_TCN	8.98	0.47
ASEJTL_SLR	8.55	0.45
AVIKIRAN	7.90	0.42
NJPC	7.44	0.39
KAPP 3&4	7.37	0.39
J & K	7.34	0.39
CLEAN_SLR	7.32	0.39
CHANDIGARH	7.19	0.38
NPGC	7.10	0.37
ORANGE_TCN	7.03	0.37
TATA_PVGD	6.89	0.36
TATA_SLR	6.81	0.36
BRBCL,NABINAGAR	6.68	0.35
BALCO	6.50	0.34
THAR1_SLR	6.23	0.33
TATA_GREEN	6.17	0.32

ARUNACHAL PRADESH	6.13	0.32
THERMAL POWERTECH	5.81	0.31
ABC_BHDL2	5.67	0.30
CGPL	5.64	0.30
NTPL	5.61	0.30
DELHI	5.54	0.29
GOA	5.53	0.29
ESSAR POWER	5.51	0.29
ACME_HEERGARH	5.18	0.27
NETCL VALLUR	4.91	0.26
SB6_POKARAN	4.90	0.26
NHPC STATIONS	4.62	0.24
AYANA_RP1	4.59	0.24
SESP	4.53	0.24
AZURE41_SLR	4.46	0.23
DD&DNH	4.40	0.23
BBMB	4.21	0.22
ACME_RUMS	4.21	0.22
MB POWER	4.18	0.22
RAIL	4.12	0.22
MAHINDRA_RUMS	4.03	0.21
RAP B	3.80	0.20
ACME_SLR	3.76	0.20
RENEWURJA_SLR	3.72	0.20
RENEW_SLR_BKN	3.70	0.19
SBSR_SLR	3.67	0.19
SIKKIM	3.65	0.19
NTPC_ANTP	3.62	0.19
AYANA_NPKUNTA	3.60	0.19
CLEANSR_SLR	3.53	0.19
MRPL	3.47	0.18
ADY1_PVGD	3.43	0.18
ARERJL_SLR	3.43	0.18
ARINSUM_RUMS	3.39	0.18
SB_SLR	3.36	0.18
RENEW_SR_SLR	3.35	0.18
NTPC STATIONS-NER	3.33	0.18
RENEWSB	3.24	0.17
AZURE_MAPLE_SLR	3.22	0.17
EDEN_SLR	3.19	0.17
GRT_JPL	3.17	0.17
AVAADA1_PVGD	3.13	0.16
TRIPURA	3.13	0.16
MSUPL_BHDL2	3.12	0.16
JSW_RENEW_2	3.12	0.16
RENEWSW_SLR	3.10	0.16
AVAADA2_PVGD	3.04	0.16
MANIPUR	2.97	0.16
SPRNG_NPKUNTA	2.84	0.15
RENEWJH_SLR	2.81	0.15
MTPS II	2.68	0.14
NEP	2.65	0.14
MAITHON POWER LTD	2.56	0.13
SBG_NPK	2.53	0.13
NEEPCO STATIONS	2.53	0.13
POWERICA	2.51	0.13
TEHRI	2.49	0.13
COASTGEN	2.36	0.12
BANGLADESH	2.33	0.12
PONDICHERRY	2.26	0.12
SBG_PVGD	2.24	0.12
FORTUM2_PVGD	2.22	0.12
RKM POWER	2.14	0.11

ADHUNIK POWER LTD	2.10	0.11
RANGANADI HEP	2.06	0.11
ESPL_RADHANESDA	2.00	0.11
AZURE_SLR	1.94	0.10
JINDAL POWER	1.88	0.10
SEMBICORP	1.86	0.10
TATA_ANTP	1.84	0.10
NAPP	1.81	0.10
TASHIDENG HEP	1.74	0.09
RPREL	1.72	0.09
GMR KAMALANGA	1.67	0.09
NSPCL	1.66	0.09
AZURE34 SLR	1.64	0.09
JHABUA POWER_MP	1.61	0.08
PARAM_PVGD	1.54	0.08
RAMPUR HEP	1.51	0.08
SIMHAPURI	1.43	0.08
TPREL_RADHANESDA	1.42	0.07
SHREE CEMENT	1.35	0.07
NAGALAND	1.27	0.07
GIPCL_RADHANESDA	1.24	0.07
KSK MAHANADI	1.15	0.06
RAP C	1.14	0.06
ACBIL	1.10	0.06
JINDAL STAGE-II	1.09	0.06
RENEW_SLR	1.03	0.05
NEPAL(NVVN)	1.02	0.05
KARCHAM WANGTOO	1.02	0.05
DGEN MEGA POWER	1.01	0.05
ADANI GREEN	1.01	0.05
KSMPL_SLR	1.00	0.05
RGPL	0.98	0.05
AZURE_PVGD	0.97	0.05
ONGC PALATANA	0.96	0.05
AHSP_ANTP	0.96	0.05
AKSP_ANTP	0.93	0.05
RENEW_PVGD	0.92	0.05
FORTUM1_PVGD	0.92	0.05
ABSP_ANTP	0.90	0.05
RSTPS_FSPP	0.88	0.05
FRV_ANTP	0.80	0.04
IL&FS	0.75	0.04
MEGHALAYA	0.74	0.04
FRV_NPK	0.70	0.04
AZURE_ANTP	0.67	0.04
YARROW_PVGD	0.65	0.03
KREDL_PVGD	0.65	0.03
DB POWER	0.63	0.03
AKS_PVGD	0.61	0.03
JITPL	0.61	0.03
ARS_PVGD	0.57	0.03
RANGIT HEP	0.57	0.03
SORANG HEP	0.56	0.03
EMCO	0.49	0.03
GSECL_Radhanesda	0.47	0.02
LANKO KONDAPALLI	0.47	0.02
MIZORAM	0.41	0.02
SASAN UMPP	0.40	0.02
MEENAKSHI	0.38	0.02
JAYPEE NIGRIE	0.33	0.02
DOYANG HEP	0.27	0.01
DIKCHU HEP	0.25	0.01
DHARIWAL POWER	0.24	0.01

KOTESHWAR	0.23	0.01
PARE HEP	0.22	0.01
CHUZACHEN HEP	0.20	0.01
NFF	0.19	0.01
TRN ENERGY	0.19	0.01
SKS POWER	0.18	0.01
JORETHANG	0.18	0.01
TEESTA STG3	0.17	0.01
SAINJ HEP	0.15	0.01
HVDC ALPD	0.10	0.01
HVDC RAIGARH	0.09	0.005
DAGACHU	0.09	0.005
LOKTAK	0.09	0.005
DCPP	0.09	0.005
RONGNICHU HEP	0.07	0.004
TEESTA HEP	0.07	0.004
SINGOLI BHATWARI HEP	0.06	0.003
HVDC PUS	0.05	0.003
LANCO BUDHIL	0.03	0.002
HVDC CHAMPA	0.03	0.002
BHADRAVATHI HVDC	0.03	0.001
AD HYDRO	0.03	0.001
TOTAL	1900.11	100.00
Volume Imported by top 5 Regional Entities	465.43	24.49

Table-25: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), JANUARY 2023		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	GUJARAT	1195.11
2	RAJASTHAN	1166.65
3	MAHARASHTRA	1071.61
4	ANDHRA PRADESH	1064.00
5	TELANGANA	1035.68
6	MP	685.26
7	HIMACHAL PRADESH	563.20
8	J & K	546.60
9	UTTARAKHAND	458.65
10	TAMIL NADU	406.54
11	AMPS Hazira	305.95
12	DD&DNH	182.87
13	NEPAL(NVVN)	181.37
14	KERALA	170.17
15	JHARKHAND	152.34
16	MEGHALAYA	109.81
17	DGPCL Bhutan	88.01
18	HARYANA	86.41
19	SIKKIM	42.54
20	MANIPUR	40.46
21	NEP	38.71
22	AGEMPL BHUJ	24.54
23	NTPC STATIONS-NR	23.37
24	NTPC STATIONS-WR	21.42
25	GIWEL_BHUJ	19.29
26	BALCO	18.89
27	ARUNACHAL PRADESH	14.32
28	ALFANAR_BHUJ	11.35
29	RENEW_BHUJ	10.89
30	PONDICHERRY	10.39
31	SBESS	10.32
32	AVADARJHN_SLR	10.12
33	RENEW_BHACHAU	9.66
34	INOX_BHUJ	9.08
35	SPRING_PUGALUR	7.98
36	KAPP 3&4	7.37
37	GIWEL_TCN	7.33
38	OSTRO Hiriyur	7.14
39	MYTRAH_TCN	7.04
40	SKRPL	6.67
41	IGSTPS	6.42
42	AZURE43_SLR	6.34
43	AVIKIRAN	6.29
44	CHANDIGARH	6.17
45	NCR ALLAHABAD	6.11
46	BETAM_TCN	6.06
47	TATA_PVGD	5.71
48	THERMAL POWERTECH	5.22
49	NPGC	4.83
50	CLEAN_SLR	4.73
51	BRBCL,NABINAGAR	4.23
52	NTPL	4.11
53	NETCL VALLUR	3.88
54	SESPL	3.45
55	AZURE41_SLR	3.05
56	ACME_RUMS	2.92
57	RAP B	2.91
58	MAHINDRA_RUMS	2.87
59	AVAADA1_PVGD	2.78
60	AVAADA2_PVGD	2.76
61	NTPC STATIONS-SR	2.74
62	NTPC_ANTP	2.70

63	AZURE_MAPLE_SLR	2.48
64	MRPL	2.41
65	GRT_JPL	2.34
66	COASTGEN	2.33
67	MSUPL_BHDL2	2.33
68	ACME_SLR	2.31
69	AYANA_NPKUNTA	2.30
70	CLEANSR_SLR	2.22
71	SBSR_SLR	2.10
72	ORANGE_TCN	2.10
73	RENEWURJA_SLR	2.09
74	IL&FS	2.05
75	RENEWSW_SLR	1.98
76	ARERJL_SLR	1.94
77	RENEW_SLR_BKN	1.92
78	EDEN_SLR	1.82
79	MTPS II	1.80
80	AYANA_RP1	1.77
81	RENEWSB	1.72
82	SB6_POKARAN	1.72
83	NJPC	1.71
84	ARINSUM_RUMS	1.67
85	POWERICA	1.67
86	RENEWJH_SLR	1.64
87	TATA_ANTP	1.57
88	ADY1_PVGD	1.56
89	RANGANADI HEP	1.56
90	SBG_PVGD	1.16
91	ESPL_RADHANESDA	1.09
92	NLC	1.04
93	DGEN MEGA POWER	1.01
94	RGPPL	0.94
95	SPRNG_NPKUNTA	0.87
96	NAPP	0.85
97	RENEW_PVGD	0.81
98	KSMPL_SLR	0.78
99	TPREL_RADHANESDA	0.76
100	ADANI GREEN	0.74
101	AHSP_ANTP	0.71
102	AKSP_ANTP	0.69
103	RENEW_SLR	0.68
104	SBG_NPK	0.62
105	ABSP_ANTP	0.61
106	FRV_ANTP	0.60
107	AZURE_ANTP	0.48
108	FORTUM2_PVGD	0.47
109	FRV_NPK	0.47
110	GIPCL_RADHANESDA	0.47
111	LANKO KONDAPALLI	0.47
112	PARAM_PVGD	0.45
113	AZURE34_SLR	0.45
114	RANGIT HEP	0.43
115	YARROW_PVGD	0.42
116	AKS_PVGD	0.40
117	MEENAKSHI	0.38
118	AZURE_PVGD	0.30
119	ARS_PVGD	0.30
120	AZURE_SLR	0.18
121	NSPCL	0.17
122	HVDC ALPD	0.08
123	DOYANG HEP	0.04
124	HVDC RAIGARH	0.02
125	NFF	0.02
126	HVDC PUS	0.004
127	BHADRAVATHI HVDC	-0.01
128	RSTPS_FSPP	-0.02

129	RAIL	-0.03
130	LOKTAK	-0.08
131	HVDC CHAMPA	-0.11
132	RONGNICHU HEP	-0.15
133	PARE HEP	-0.17
134	KREDL_PVGD	-0.21
135	VINDHYACHAL HVDC	-0.24
136	RAP C	-0.34
137	GSECL_Radhanesda	-0.36
138	FORTUM1_PVGD	-0.39
139	KSK MAHANADI	-0.80
140	CHUZACHEN HEP	-0.95
141	LANCO BUDHIL	-0.96
142	RAMPUR HEP	-0.97
143	BANGLADESH	-1.19
144	MAITHON POWER LTD	-1.53
145	DHARIWAL POWER	-1.68
146	JORETHANG	-1.76
147	GOA	-1.78
148	TASHIDENG HEP	-2.03
149	NAGALAND	-3.21
150	BARC	-3.66
151	TEHRI	-3.88
152	KOTESHWAR	-3.90
153	CGPL	-4.49
154	MIZORAM	-4.55
155	BBMB	-4.96
156	NTPC STATIONS-NER	-5.29
157	OSTRO	-6.59
158	ASEJTL_SLR	-7.07
159	REGL	-8.14
160	DIKCHU HEP	-8.21
161	SORANG HEP	-8.42
162	JSW_RENEW_2	-8.57
163	SB_SLR	-9.40
164	SAINJ HEP	-10.61
165	SINGOLI BHATWARI HEP	-13.09
166	KARCHAM WANGTOO	-13.42
167	AD HYDRO	-14.62
168	DAGACHU	-16.08
169	EMCO	-16.52
170	LANKO_AMK	-19.68
171	TEESTA HEP	-19.96
172	NHPC STATIONS	-22.01
173	ONGC PALATANA	-24.19
174	RENEW_SR_SLR	-25.34
175	ASSAM	-26.02
176	TATA_SLR	-26.11
177	DCPP	-26.74
178	ADANI_WIND	-29.54
179	SIMHAPURI	-30.77
180	MARUTI COAL	-31.23
181	TRN ENERGY	-31.51
182	TATA_GREEN	-36.99
183	THAR1_SLR	-36.99
184	SASAN UMPP	-42.25
185	ACME_HEERGARH	-44.43
186	JHABUA POWER_MP	-48.10
187	AVAADASN_SLR	-50.55
188	TRIPURA	-57.30
189	GMR KAMALANGA	-60.30
190	ABC_BHDL2	-60.64
191	ODISHA	-64.90
192	DVC	-65.84
193	NTPC STATIONS-ER	-68.61
194	KOLYAT_SLR	-78.07

195	NEEPCO STATIONS	-78.20
196	ACBIL	-83.84
197	TEESTA STG3	-84.43
198	SHREE CEMENT	-93.83
199	MB POWER	-122.98
200	AHEJ4L SOLAR	-125.42
201	AHEJ4L WIND	-131.00
202	SKS POWER	-157.68
203	DB POWER	-178.08
204	ADHUNIK POWER LTD	-178.46
205	ESSAR POWER	-203.76
206	JAYPEE NIGRIE	-262.87
207	RKM POWER	-271.82
208	DELHI	-276.20
209	KARNATAKA	-278.61
210	SEMBCORP	-281.03
211	CHHATTISGARH	-305.45
212	JITPL	-351.56
213	JINDAL POWER	-375.95
214	PUNJAB	-429.05
215	RPREL	-578.48
216	JINDAL STAGE-II	-750.33
217	WEST BENGAL	-768.20
218	BIHAR	-917.20
219	UTTAR PRADESH	-1292.32
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchange and DSM		
(-) indicates sale and (+) indicates purchase		

Table-26: DETAILS OF CONGESTION IN POWER EXCHANGES, JANUARY 2023										
	Details of Congestion	Day Ahead Market			Green Day Ahead Market			Real Time Market		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX
A	Unconstrained Cleared Volume (MUs)	4947.96	0.12	0.00	285.15	0.00	0.00	2101.88	0.00	0.00
B	Actual Cleared Volume and hence scheduled (MUs)	4947.96	0.12	0.00	285.15	0.00	0.00	2101.88	0.00	0.00
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/ Total number of hours in the month)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
G	Congestion occurrence (%) time block wise									
	0.00 - 6.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
* This power would have been scheduled had there been no congestion										
Source: IEX, PXIL, HPX & NLDC										

Table-27: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), JANUARY 2023													
Date	Bilateral		Day Ahead Market [#]			Green Day Ahead Market [#]			Real Time Market [#]			Deviation Settlement (Over Drawl + Under Generation)	Total Electricity Generation (MU) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX		
1-Jan-23	108.63	105.38	190.89	0.00	0.00	9.69	0.00	0.00	47.88	0.00	0.00	56.24	3719.69
2-Jan-23	118.96	107.91	185.36	0.00	0.00	7.96	0.00	0.00	54.02	0.00	0.00	52.89	3856.74
3-Jan-23	127.95	110.64	172.50	0.00	0.00	7.94	0.00	0.00	59.97	0.00	0.00	54.18	3897.19
4-Jan-23	120.29	109.57	149.96	0.00	0.00	10.55	0.00	0.00	68.84	0.00	0.00	57.75	3813.23
5-Jan-23	118.04	110.78	152.70	0.00	0.00	8.58	0.00	0.00	79.83	0.00	0.00	55.47	3824.24
6-Jan-23	120.91	110.23	159.53	0.00	0.00	6.12	0.00	0.00	104.24	0.00	0.00	60.05	3875.67
7-Jan-23	120.48	107.05	177.27	0.00	0.00	9.57	0.00	0.00	103.06	0.00	0.00	59.77	3942.23
8-Jan-23	114.92	107.41	198.30	0.00	0.00	8.88	0.00	0.00	73.19	0.00	0.00	54.48	3869.64
9-Jan-23	140.51	100.28	161.49	0.00	0.00	10.03	0.00	0.00	62.89	0.00	0.00	60.33	3954.88
10-Jan-23	151.19	106.12	145.17	0.00	0.00	9.79	0.00	0.00	72.06	0.00	0.00	54.84	3973.30
11-Jan-23	166.61	107.20	129.04	0.00	0.00	7.99	0.00	0.00	73.70	0.00	0.00	55.92	4002.26
12-Jan-23	152.82	107.09	154.71	0.00	0.00	4.29	0.00	0.00	77.87	0.00	0.00	57.99	3981.18
13-Jan-23	160.14	107.55	155.55	0.00	0.00	7.55	0.00	0.00	64.29	0.00	0.00	61.10	4003.36
14-Jan-23	147.11	109.86	145.19	0.00	0.00	8.93	0.00	0.00	70.57	0.00	0.00	63.29	3799.67
15-Jan-23	112.73	111.91	153.71	0.00	0.00	10.71	0.00	0.00	63.71	0.00	0.00	58.06	3630.54
16-Jan-23	121.16	113.73	144.14	0.00	0.00	9.28	0.00	0.00	76.10	0.00	0.00	55.85	3791.93
17-Jan-23	122.89	110.38	147.85	0.00	0.00	9.38	0.00	0.00	73.25	0.00	0.00	52.25	3858.20
18-Jan-23	123.72	111.04	152.02	0.00	0.00	10.16	0.00	0.00	64.16	0.00	0.00	50.04	3927.48
19-Jan-23	125.55	110.50	164.26	0.00	0.00	7.88	0.00	0.00	65.40	0.00	0.00	60.69	3913.43
20-Jan-23	133.13	112.37	144.37	0.00	0.00	8.47	0.00	0.00	65.68	0.00	0.00	59.13	3941.17
21-Jan-23	132.05	111.70	167.17	0.00	0.00	8.73	0.00	0.00	59.41	0.00	0.00	57.82	3910.25
22-Jan-23	123.15	108.34	161.25	0.00	0.00	9.14	0.00	0.00	58.49	0.00	0.00	56.38	3779.43
23-Jan-23	134.40	107.92	163.59	0.12	0.00	11.12	0.00	0.00	68.80	0.00	0.00	60.17	3835.99
24-Jan-23	123.77	108.26	170.40	0.00	0.00	10.93	0.00	0.00	53.81	0.00	0.00	63.14	3897.15
25-Jan-23	121.22	106.26	164.74	0.00	0.00	12.27	0.00	0.00	68.86	0.00	0.00	59.68	3813.23
26-Jan-23	99.66	111.79	129.24	0.00	0.00	10.68	0.00	0.00	58.00	0.00	0.00	59.14	3481.18
27-Jan-23	110.45	111.70	143.34	0.00	0.00	11.41	0.00	0.00	53.66	0.00	0.00	58.41	3628.17
28-Jan-23	112.95	109.62	163.36	0.00	0.00	10.32	0.00	0.00	64.26	0.00	0.00	51.65	3757.61
29-Jan-23	96.45	103.94	169.74	0.00	0.00	9.55	0.00	0.00	65.19	0.00	0.00	63.79	3662.85
30-Jan-23	116.95	106.69	184.87	0.00	0.00	8.76	0.00	0.00	63.54	0.00	0.00	65.53	3748.79
31-Jan-23	120.80	112.92	146.25	0.00	0.00	8.47	0.00	0.00	67.14	0.00	0.00	62.54	3756.09
Total	3899.57	3376.11	4947.96	0.12	0.00	285.15	0.00	0.00	2101.88	0.00	0.00	1798.53	118846.77
Source: NLDC													
* Gross Electricity Generation excluding electricity generation from renewables and captive power plants.													
** The volume of bilateral through PXs represents the volume through term-ahead contracts.													
[#] Scheduled volume of all the bid areas.													

Table-28(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JANUARY 2023									
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Day ahead market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Jan-23	2.36	8.40	5.11	-	-	-	-	-	-
2-Jan-23	2.00	12.00	6.35	-	-	-	-	-	-
3-Jan-23	2.14	10.07	5.73	-	-	-	-	-	-
4-Jan-23	2.50	12.00	6.37	-	-	-	-	-	-
5-Jan-23	2.45	12.00	7.17	-	-	-	-	-	-
6-Jan-23	2.20	12.00	7.51	-	-	-	-	-	-
7-Jan-23	2.15	12.00	7.97	-	-	-	-	-	-
8-Jan-23	2.54	12.00	6.24	-	-	-	-	-	-
9-Jan-23	2.45	12.00	7.64	-	-	-	-	-	-
10-Jan-23	2.89	12.00	8.08	-	-	-	-	-	-
11-Jan-23	2.89	12.00	8.39	-	-	-	-	-	-
12-Jan-23	2.84	12.00	8.33	-	-	-	-	-	-
13-Jan-23	2.77	12.00	8.28	-	-	-	-	-	-
14-Jan-23	2.89	12.00	7.81	-	-	-	-	-	-
15-Jan-23	2.84	12.00	6.66	-	-	-	-	-	-
16-Jan-23	2.45	12.00	6.59	-	-	-	-	-	-
17-Jan-23	2.63	12.00	6.61	-	-	-	-	-	-
18-Jan-23	2.74	12.00	6.35	-	-	-	-	-	-
19-Jan-23	2.70	12.00	6.71	-	-	-	-	-	-
20-Jan-23	2.82	12.00	7.39	-	-	-	-	-	-
21-Jan-23	2.76	12.00	7.44	-	-	-	-	-	-
22-Jan-23	2.63	8.86	4.81	-	-	-	-	-	-
23-Jan-23	2.45	12.00	6.53	9.90	12.00	11.33	-	-	-
24-Jan-23	2.43	12.00	5.28	-	-	-	-	-	-
25-Jan-23	2.50	12.00	5.26	-	-	-	-	-	-
26-Jan-23	2.25	8.25	4.07	-	-	-	-	-	-
27-Jan-23	2.12	12.00	4.73	-	-	-	-	-	-
28-Jan-23	2.66	12.00	5.03	-	-	-	-	-	-
29-Jan-23	2.70	8.00	4.05	-	-	-	-	-	-
30-Jan-23	2.82	12.00	5.00	-	-	-	-	-	-
31-Jan-23	2.73	12.00	4.38	-	-	-	-	-	-
	2.00[#]	12.00[#]	6.36	9.90[#]	12.00[#]	11.33	-	-	-
Source: IEX, PXIL and HPX									
* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.									
[#] Maximum/Minimum in the month									

Table-28(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JANUARY 2023									
Market Segment	Green Day ahead market of IEX			Green Day ahead market of PXIL			Green Day ahead market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Jan-23	3.00	6.50	4.49	-	-	-	-	-	-
2-Jan-23	2.92	12.00	6.54	-	-	-	-	-	-
3-Jan-23	3.36	12.00	6.70	-	-	-	-	-	-
4-Jan-23	2.90	11.00	5.40	-	-	-	-	-	-
5-Jan-23	2.95	12.00	6.44	-	-	-	-	-	-
6-Jan-23	3.36	12.00	8.25	-	-	-	-	-	-
7-Jan-23	3.03	12.00	7.16	-	-	-	-	-	-
8-Jan-23	3.05	12.00	7.08	-	-	-	-	-	-
9-Jan-23	3.03	12.00	6.15	-	-	-	-	-	-
10-Jan-23	3.03	12.00	7.28	-	-	-	-	-	-
11-Jan-23	3.30	12.00	7.76	-	-	-	-	-	-
12-Jan-23	3.59	12.00	9.25	-	-	-	-	-	-
13-Jan-23	3.30	12.00	8.40	-	-	-	-	-	-
14-Jan-23	3.30	12.00	7.78	-	-	-	-	-	-
15-Jan-23	3.12	12.00	6.51	-	-	-	-	-	-
16-Jan-23	3.24	12.00	7.47	-	-	-	-	-	-
17-Jan-23	3.20	12.00	6.59	-	-	-	-	-	-
18-Jan-23	3.00	12.00	6.29	-	-	-	-	-	-
19-Jan-23	3.30	12.00	6.73	-	-	-	-	-	-
20-Jan-23	3.05	12.00	6.89	-	-	-	-	-	-
21-Jan-23	3.24	12.00	7.14	-	-	-	-	-	-
22-Jan-23	3.10	12.00	6.41	-	-	-	-	-	-
23-Jan-23	2.99	12.00	6.91	-	-	-	-	-	-
24-Jan-23	2.86	12.00	6.81	-	-	-	-	-	-
25-Jan-23	2.86	11.50	4.64	-	-	-	-	-	-
26-Jan-23	2.99	6.00	4.13	-	-	-	-	-	-
27-Jan-23	2.86	9.00	4.67	-	-	-	-	-	-
28-Jan-23	3.00	11.50	4.93	-	-	-	-	-	-
29-Jan-23	3.24	7.50	4.33	-	-	-	-	-	-
30-Jan-23	2.99	12.00	5.22	-	-	-	-	-	-
31-Jan-23	3.30	12.00	5.31	-	-	-	-	-	-
	2.86[#]	12.00[#]	6.30	-	-	-	-	-	-
Source: IEX, PXIL and HPX									
* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.									
[#] Maximum/Minimum in the month									

Table-28(c): PRICE OF REAL TIME TRANSACTIONS AND DSM (DAY-WISE) (₹/kWh), JANUARY 2023

Market Segment	Real Time market of IEX			Real Time market of PXIL			Real Time market of HPX			Under Drawl/Over Drawl from the Grid (DSM)**		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid		
										Minimum Price	Maximum Price	Average Price
1-Jan-23	2.15	8.75	4.28	-	-	-	-	-	-	2.45	12.00	5.09
2-Jan-23	1.00	12.00	5.51	-	-	-	-	-	-	2.00	12.00	6.28
3-Jan-23	2.45	12.00	5.98	-	-	-	-	-	-	2.45	12.00	6.40
4-Jan-23	1.86	12.00	5.70	-	-	-	-	-	-	2.50	12.00	6.41
5-Jan-23	1.80	12.00	7.39	-	-	-	-	-	-	2.45	12.00	7.41
6-Jan-23	2.19	12.00	9.04	-	-	-	-	-	-	2.20	12.00	8.66
7-Jan-23	2.72	12.00	8.38	-	-	-	-	-	-	2.72	12.00	8.37
8-Jan-23	1.59	12.00	5.87	-	-	-	-	-	-	2.70	12.00	6.65
9-Jan-23	2.70	12.00	8.56	-	-	-	-	-	-	2.60	12.00	8.21
10-Jan-23	2.85	12.00	9.83	-	-	-	-	-	-	2.80	12.00	9.22
11-Jan-23	2.85	12.00	8.81	-	-	-	-	-	-	2.89	12.00	8.87
12-Jan-23	2.70	12.00	8.39	-	-	-	-	-	-	2.85	12.00	8.59
13-Jan-23	2.99	12.00	8.99	-	-	-	-	-	-	2.82	12.00	8.83
14-Jan-23	2.99	12.00	5.29	-	-	-	-	-	-	2.85	12.00	7.91
15-Jan-23	1.49	5.50	3.74	-	-	-	-	-	-	2.85	12.00	6.43
16-Jan-23	1.85	9.00	4.70	-	-	-	-	-	-	2.45	12.00	6.55
17-Jan-23	2.55	12.00	5.39	-	-	-	-	-	-	2.70	12.00	6.55
18-Jan-23	2.70	12.00	6.08	-	-	-	-	-	-	2.78	12.00	6.73
19-Jan-23	2.82	12.00	7.57	-	-	-	-	-	-	2.72	12.00	7.42
20-Jan-23	2.85	12.00	8.46	-	-	-	-	-	-	2.82	12.00	8.76
21-Jan-23	2.60	12.00	6.95	-	-	-	-	-	-	2.76	12.00	7.37
22-Jan-23	2.82	8.75	4.69	-	-	-	-	-	-	2.72	9.32	5.07
23-Jan-23	0.50	12.00	4.33	-	-	-	-	-	-	2.45	12.00	6.29
24-Jan-23	0.49	12.00	4.85	-	-	-	-	-	-	2.43	12.00	5.69
25-Jan-23	1.79	12.00	4.74	-	-	-	-	-	-	2.50	12.00	5.22
26-Jan-23	1.46	6.00	3.08	-	-	-	-	-	-	2.25	12.00	4.05
27-Jan-23	0.49	6.45	3.51	-	-	-	-	-	-	2.12	12.00	4.64
28-Jan-23	1.88	12.00	5.00	-	-	-	-	-	-	2.70	12.00	5.13
29-Jan-23	1.57	6.15	3.92	-	-	-	-	-	-	2.70	12.00	4.38
30-Jan-23	1.10	12.00	4.51	-	-	-	-	-	-	2.63	12.00	6.59
31-Jan-23	1.46	12.00	5.10	-	-	-	-	-	-	2.73	12.00	5.77
	0.49[#]	12.00[#]	6.26	-	-	-	-	-	-	2.00[#]	12.00[#]	6.76

Source: Data on price of PX transactions from IEX, PXIL and HPX and data on DSM Price from NLDC.

* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.

** CERC DSM Regulations 2022 came into effect from 05.12.2022, wherein normal rate of charges for deviation for a time block is equal to the highest of the [weighted average Area Clearing Price (ACP) of the Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of the Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary Service Charge of all the regions]. Thereafter a ceiling of Rs. 12/kWh was imposed by CERC from 28.12.2022

[#] Maximum/Minimum in the month

Table-29: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), JANUARY 2023										
Name of the Entity	Through Bilateral (Traders + PXs + Direct)			Through Power Exchange (DAM + GDAM + RTM)			Through DSM with Regional Grid			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	Import (Over Drawl)	Export (Under Drawl)	Net**	
PUNJAB	1231.36	57.46	-1173.90	0.24	779.69	779.45	26.16	60.76	-34.60	-429.05
HARYANA	308.76	175.08	-133.68	20.78	273.70	252.92	28.93	61.76	-32.83	86.41
RAJASTHAN	83.38	653.97	570.59	81.62	699.63	618.01	62.71	84.66	-21.95	1166.65
DELHI	305.83	153.62	-152.20	203.79	135.53	-68.26	5.54	61.28	-55.74	-276.20
UTTAR PRADESH	731.75	153.27	-578.48	1072.27	361.44	-710.83	76.95	79.96	-3.01	-1292.32
UTTARAKHAND	5.87	368.38	362.50	16.73	113.34	96.61	25.30	25.76	-0.47	458.65
HIMACHAL PRADESH	18.51	608.22	589.71	60.99	19.78	-41.21	27.48	12.77	14.70	563.20
J & K	41.14	90.51	49.37	59.33	610.44	551.11	7.34	61.22	-53.88	546.60
CHANDIGARH	0.00	0.00	0.00	7.51	12.70	5.19	7.19	6.20	0.98	6.17
MP	110.22	1214.47	1104.26	345.97	47.61	-298.35	18.53	139.18	-120.65	685.26
MAHARASHTRA	51.93	757.39	705.46	205.61	589.28	383.67	55.58	73.09	-17.51	1071.61
GUJARAT	41.74	357.64	315.90	84.89	1022.91	938.02	67.08	125.89	-58.81	1195.11
CHHATTISGARH	145.85	106.31	-39.54	296.39	32.54	-263.85	25.22	27.27	-2.05	-305.45
GOA	0.65	30.40	29.76	39.30	6.09	-33.21	5.53	3.85	1.68	-1.78
DD&DNH	0.00	48.33	48.33	2.30	137.56	135.26	4.40	5.13	-0.73	182.87
ANDHRA P	5.20	501.34	496.14	48.59	626.13	577.54	28.13	37.81	-9.68	1064.00
KARNATAKA	148.53	105.40	-43.13	314.04	85.58	-228.45	47.99	55.02	-7.03	-278.61
KERALA	0.00	160.00	160.00	61.03	67.47	6.44	9.32	5.58	3.74	170.17
TAMIL NADU	96.35	273.63	177.28	112.78	357.09	244.31	46.00	61.05	-15.05	406.54
PONDICHERRY	0.00	21.21	21.21	0.00	0.00	0.00	2.26	13.08	-10.82	10.39
TELANGANA	108.33	669.46	561.12	62.70	535.65	472.95	48.80	47.19	1.61	1035.68
WEST BENGAL	118.20	24.36	-93.83	840.46	116.21	-724.25	55.53	5.64	49.88	-768.20
ODISHA	91.84	125.29	33.45	308.87	112.24	-196.63	101.40	3.13	98.27	-64.90
BIHAR	24.33	0.00	-24.33	945.99	2.72	-943.27	61.29	10.89	50.40	-917.20
JHARKHAND	0.00	140.50	140.50	36.01	27.84	-8.18	27.49	7.48	20.01	152.34
SIKKIM	0.92	52.38	51.46	13.46	2.59	-10.87	3.65	1.70	1.95	42.54
DVC	89.78	0.00	-89.78	22.86	62.10	39.24	16.49	31.79	-15.30	-65.84
ARUNACHAL P	4.74	22.32	17.58	7.41	0.44	-6.97	6.13	2.41	3.72	14.32
ASSAM	0.00	0.20	0.20	83.30	52.70	-30.60	12.43	8.04	4.39	-26.02
MANIPUR	0.00	32.07	32.07	1.77	9.36	7.60	2.97	2.18	0.79	40.46
MEGHALAYA	0.18	115.32	115.14	0.38	2.29	1.91	0.74	7.98	-7.24	109.81
MIZORAM	0.00	1.11	1.11	0.77	0.00	-0.77	0.41	5.29	-4.88	-4.55
NAGALAND	0.00	0.00	0.00	2.27	0.00	-2.27	1.27	2.21	-0.94	-3.21
TRIPURA	0.00	0.00	0.00	55.78	1.46	-54.32	3.13	6.11	-2.98	-57.30
NTPC STATIONS-NR	63.60	0.00	-63.60	0.00	0.00	0.00	120.16	33.19	86.98	23.37
NHPC STATIONS	0.00	0.00	0.00	0.93	0.00	-0.93	4.62	25.70	-21.08	-22.01
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.18	0.02	0.02
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	4.12	4.16	-0.03	-0.03
NEP	0.00	0.00	0.00	0.00	38.14	38.14	2.65	2.09	0.56	38.71
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	1.81	0.96	0.85	0.85
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	3.80	0.89	2.91	2.91
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	7.44	5.73	1.71	1.71
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	2.49	6.38	-3.88	-3.88
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	4.21	9.17	-4.96	-4.96
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.48	-0.34	-0.34
AD HYDRO	11.68	0.00	-11.68	2.76	0.00	-2.76	0.03	0.21	-0.18	-14.62
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	18.43	12.01	6.42	6.42
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	0.23	4.13	-3.90	-3.90
KARCHAM WANGTOO	4.36	0.00	-4.36	8.20	0.00	-8.20	1.02	1.88	-0.86	-13.42
SHREE CEMENT	79.17	0.00	-79.17	15.59	0.00	-15.59	1.35	0.41	0.93	-93.83
LANCO BUDHIL	0.00	0.00	0.00	0.69	0.00	-0.69	0.03	0.30	-0.27	-0.96
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.51	2.48	-0.97	-0.97
SORANG HEP	4.90	0.00	-4.90	3.28	0.00	-3.28	0.56	0.80	-0.24	-8.42
SAINJ HEP	0.81	0.00	-0.81	9.58	0.00	-9.58	0.15	0.37	-0.22	-10.61
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.34	0.68	0.68
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.94	1.77	0.18	0.18

SB_SLR	5.48	0.00	-5.48	6.43	0.00	-6.43	3.36	0.85	2.51	-9.40
ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.76	1.45	2.31	2.31
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.64	1.18	0.45	0.45
TATA_SLR	31.96	0.00	-31.96	0.00	0.00	0.00	6.81	0.96	5.85	-26.11
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	3.70	1.79	1.92	1.92
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	7.32	2.59	4.73	4.73
ARERJL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.43	1.49	1.94	1.94
KSMPL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.22	0.78	0.78
ADANI GREEN	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.26	0.74	0.74
ASEJTL_SLR	0.00	0.00	0.00	10.64	0.00	-10.64	8.55	4.97	3.57	-7.07
SINGOLI BHATWARI HE	11.78	0.00	-11.78	1.18	0.00	-1.18	0.06	0.19	-0.13	-13.09
AZURE43_SLR	0.00	0.00	0.00	0.00	0.00	0.00	9.74	3.40	6.34	6.34
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	3.47	1.05	2.41	2.41
SB6_POKARAN	0.00	0.00	0.00	0.00	0.00	0.00	4.90	3.18	1.72	1.72
EDEN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.19	1.37	1.82	1.82
SBSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.67	1.57	2.10	2.10
RENEWSW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.10	1.12	1.98	1.98
RENEWJH_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.81	1.17	1.64	1.64
AHEJ4L_WIND	131.00	0.00	-131.00	0.00	0.00	0.00	0.00	0.00	0.00	-131.00
AHEJ4L_SOLAR	125.42	0.00	-125.42	0.00	0.00	0.00	0.00	0.00	0.00	-125.42
RENEWSB	0.00	0.00	0.00	0.00	0.00	0.00	3.24	1.52	1.72	1.72
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	4.46	1.41	3.05	3.05
AYANA_RP1	0.00	0.00	0.00	0.00	0.00	0.00	4.59	2.82	1.77	1.77
AVAADASN_SLR	59.40	0.00	-59.40	0.00	0.00	0.00	14.18	5.33	8.85	-50.55
RENEWURJA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.72	1.63	2.09	2.09
AVADARJHN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	11.95	1.83	10.12	10.12
NCR ALLAHABAD	0.00	0.00	0.00	0.00	6.11	6.11	0.00	0.00	0.00	6.11
RENEW_SR_SLR	19.42	0.00	-19.42	8.09	0.00	-8.09	3.35	1.19	2.16	-25.34
AZURE_MAPLE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.22	0.74	2.48	2.48
THAR1_SLR	41.86	0.00	-41.86	0.00	0.00	0.00	6.23	1.36	4.87	-36.99
CLEANSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.53	1.30	2.22	2.22
ACME_HEERGARH	46.97	0.00	-46.97	0.00	0.00	0.00	5.18	2.63	2.54	-44.43
ABC_BHDL2	63.63	0.00	-63.63	0.00	0.00	0.00	5.67	2.68	2.99	-60.64
MSUPL_BHDL2	0.00	0.00	0.00	0.00	0.00	0.00	3.12	0.79	2.33	2.33
KOLYAT_SLR	78.07	0.00	-78.07	0.00	0.00	0.00	0.00	0.00	0.00	-78.07
TATA_GREEN	41.83	0.00	-41.83	0.00	0.00	0.00	6.17	1.33	4.84	-36.99
NTPC STATIONS-WR	1.28	0.00	-1.28	24.98	0.00	-24.98	99.83	52.16	47.68	21.42
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	-0.01	-0.01
VINDHYACHAL HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-0.24	-0.24
JINDAL POWER	303.22	0.00	-303.22	71.02	0.00	-71.02	1.88	3.60	-1.72	-375.95
LANKO_AMK	10.16	0.00	-10.16	0.00	0.00	0.00	0.00	9.53	-9.53	-19.68
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	1.66	1.49	0.17	0.17
ACBIL	32.91	0.00	-32.91	48.63	0.00	-48.63	1.10	3.39	-2.29	-83.84
BALCO	6.80	29.26	22.46	19.14	12.09	-7.05	6.50	3.02	3.48	18.89
RGPLL	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.04	0.94	0.94
CGPL	0.00	0.00	0.00	9.38	0.00	-9.38	5.64	0.76	4.89	-4.49
DCPP	0.00	0.00	0.00	26.59	0.00	-26.59	0.09	0.23	-0.15	-26.74
EMCO	0.00	0.00	0.00	12.97	0.00	-12.97	0.49	4.04	-3.55	-16.52
KSK MAHANADI	0.00	0.00	0.00	0.00	0.00	0.00	1.15	1.95	-0.80	-0.80
ESSAR POWER	130.23	0.00	-130.23	80.39	2.63	-77.76	5.51	1.28	4.23	-203.76
JINDAL STAGE-II	597.52	0.00	-597.52	146.22	2.12	-144.10	1.09	9.80	-8.71	-750.33
DB POWER	40.64	0.00	-40.64	132.10	0.00	-132.10	0.63	5.97	-5.346	-178.081
DHARIWAL POWER	0.00	0.00	0.00	0.94	0.00	-0.94	0.24	0.97	-0.74	-1.68
JAYPEE NIGRIE	46.76	0.00	-46.76	209.02	0.00	-209.02	0.33	7.42	-7.09	-262.87
DGEN MEGA POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	1.01	1.01
MB POWER	98.31	0.00	-98.31	26.69	0.00	-26.69	4.18	2.17	2.01	-122.98
MARUTI COAL	0.00	0.00	0.00	32.47	1.25	-31.23	0.00	0.00	0.00	-31.23
JHABUA POWER_MP	0.96	0.00	-0.96	47.28	0.00	-47.28	1.61	1.47	0.14	-48.10
SASAN UMPP	0.00	0.00	0.00	8.03	0.00	-8.03	0.40	34.63	-34.22	-42.25
TRN ENERGY	14.88	0.00	-14.88	15.28	0.00	-15.28	0.19	1.54	-1.35	-31.51
RKM POWER	191.57	0.00	-191.57	73.79	0.00	-73.79	2.14	8.60	-6.47	-271.82
SKS POWER	126.06	0.00	-126.06	30.16	0.00	-30.16	0.18	1.64	-1.46	-157.68
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.66	-3.66	-3.66

KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	7.37	0.00	7.37	7.37
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14	-0.11	-0.11
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.03	1.16	2.87	2.87
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.39	1.72	1.67	1.67
OSTRO	0.71	0.00	-0.71	17.54	0.00	-17.54	14.68	3.02	11.67	-6.59
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.21	1.29	2.92	2.92
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	12.50	2.84	9.66	9.66
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	25.21	5.92	19.29	19.29
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	11.35	2.27	9.08	9.08
AGEMPL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	30.04	5.51	24.54	24.54
REGL	0.00	0.00	0.00	8.14	0.00	-8.14	0.00	0.00	0.00	-8.14
RPREL	414.61	0.00	-414.61	163.23	0.00	-163.23	1.72	2.36	-0.64	-578.48
AMPS Hazira	0.00	226.79	226.79	0.00	84.70	84.70	19.48	25.02	-5.54	305.95
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.08	0.02	0.02
ALFANAR_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	14.74	3.40	11.35	11.35
RENEW_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	14.64	3.76	10.89	10.89
ADANI_WIND	2.13	0.00	-2.13	27.41	0.00	-27.41	0.00	0.00	0.00	-29.54
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.66	0.76	0.76
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.92	1.09	1.09
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.77	0.47	0.47
GSECL_Radhanesda	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.83	-0.36	-0.36
AVIKIRAN	0.00	0.00	0.00	0.00	0.00	0.00	7.90	1.61	6.29	6.29
SESPL	0.00	0.00	0.00	0.00	0.00	0.00	4.53	1.08	3.45	3.45
POWERICA	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.84	1.67	1.67
SKRPL	0.00	0.00	0.00	0.00	0.00	0.00	9.51	2.83	6.67	6.67
SBESS	0.00	0.00	0.00	0.00	0.00	0.00	14.88	4.56	10.32	10.32
NTPC STATIONS-SR	8.56	0.00	-8.56	32.26	0.00	-32.26	56.90	13.34	43.56	2.74
LANCO KONDAPALLI	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.47	0.47
SIMHAPURI	0.00	0.00	0.00	32.18	0.00	-32.18	1.43	0.02	1.42	-30.77
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.38	0.38
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	2.36	0.02	2.33	2.33
THERMAL POWERTECH	0.00	0.00	0.00	0.00	0.00	0.00	5.81	0.58	5.22	5.22
IL&FS	0.00	0.00	0.00	0.00	1.31	1.31	0.75	0.01	0.74	2.05
NLC	0.00	0.00	0.00	6.48	0.00	-6.48	17.15	9.63	7.52	1.04
SEMBCORP	86.62	0.00	-86.62	194.56	0.00	-194.56	1.86	1.72	0.14	-281.03
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	4.91	1.02	3.88	3.88
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	5.61	1.50	4.11	4.11
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.25	0.71	0.71
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.24	0.69	0.69
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.29	0.61	0.61
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.20	0.48	0.48
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.84	0.27	1.57	1.57
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.20	0.60	0.60
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	3.62	0.91	2.70	2.70
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	11.27	3.94	7.33	7.33
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.45	2.42	7.04	7.04
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.23	0.47	0.47
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	7.03	4.93	2.10	2.10
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.98	2.92	6.06	6.06
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.24	1.08	1.16	1.16
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	2.53	1.91	0.62	0.62
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.92	1.31	-0.39	-0.39
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.54	1.09	0.45	0.45
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.24	0.42	0.42
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	6.89	1.18	5.71	5.71
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.11	0.81	0.81
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.21	0.40	0.40
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.27	0.30	0.30
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.13	0.36	2.78	2.78
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.43	1.87	1.56	1.56
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.67	0.30	0.30
FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.22	1.75	0.47	0.47
AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.04	0.28	2.76	2.76

KREDL PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.86	-0.21	-0.21
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	3.60	1.30	2.30	2.30
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	2.84	1.97	0.87	0.87
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	10.06	2.09	7.98	7.98
OSTRO Hiriyur	0.00	0.00	0.00	3.39	0.00	-3.39	12.77	2.24	10.54	7.14
RSTPS_FSPP	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.91	-0.02	-0.02
GRT_JPL	0.00	0.00	0.00	0.00	0.00	0.00	3.17	0.83	2.34	2.34
JSW_RENEW_2	10.67	0.00	-10.67	0.00	0.00	0.00	3.12	1.02	2.09	-8.57
NTPC STATIONS-ER	0.00	0.00	0.00	98.51	0.00	-98.51	55.64	25.74	29.90	-68.61
MAITHON POWER LTD	0.00	0.00	0.00	0.00	0.00	0.00	2.56	4.09	-1.53	-1.53
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	7.10	2.27	4.83	4.83
ADHUNIK POWER LTD	164.93	0.00	-164.93	13.26	0.00	-13.26	2.10	2.37	-0.27	-178.46
CHUZACHEN HEP	0.00	0.00	0.00	0.95	0.00	-0.95	0.20	0.20	0.00	-0.95
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.14	0.43	0.43
GMR KAMALANGA	61.44	0.00	-61.44	0.13	0.00	-0.13	1.67	0.41	1.26	-60.30
JITPL	193.63	0.00	-193.63	152.66	0.00	-152.66	0.61	5.88	-5.27	-351.56
TEESTA HEP	0.00	0.00	0.00	18.17	0.00	-18.17	0.07	1.86	-1.79	-19.96
DAGACHU	16.06	0.00	-16.06	0.00	0.00	0.00	0.09	0.11	-0.02	-16.08
JORETHANG	1.42	0.00	-1.42	0.27	0.00	-0.27	0.18	0.25	-0.07	-1.76
NEPAL(NVVN)	0.00	0.00	0.00	0.00	194.65	194.65	1.02	14.30	-13.28	181.37
BANGLADESH	0.00	0.00	0.00	0.00	0.00	0.00	2.33	3.53	-1.19	-1.19
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00
TEESTA STG3	83.22	0.00	-83.22	0.00	0.00	0.00	0.17	1.38	-1.21	-84.43
DIKCHU HEP	6.24	0.00	-6.24	1.87	0.00	-1.87	0.25	0.34	-0.09	-8.21
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.02	0.08	0.08
TASHIDENG HEP	2.01	0.00	-2.01	0.25	0.00	-0.25	1.74	1.52	0.23	-2.03
BRBCL,NABINAGAR	0.00	0.00	0.00	0.00	0.00	0.00	6.68	2.44	4.23	4.23
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	2.68	0.88	1.80	1.80
RONGNICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.22	-0.15	-0.15
DGPCL Bhutan	0.00	0.00	0.00	0.00	88.01	88.01	0.00	0.00	0.00	88.01
NTPC STATIONS-NER	0.00	0.00	0.00	6.47	0.00	-6.47	3.33	2.15	1.18	-5.29
NEEPCO STATIONS	31.47	0.00	-31.47	39.32	0.00	-39.32	2.53	9.94	-7.41	-78.20
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	2.06	0.50	1.56	1.56
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.24	0.04	0.04
ONGC PALATANA	3.92	0.00	-3.92	19.47	0.00	-19.47	0.96	1.77	-0.80	-24.19
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.16	-0.08	-0.08
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.39	-0.17	-0.17

Source: NLDC

* in case of a state, the entities which are "selling" also include generators connected to state grid and the entities which are "buying" also include open access consumers.

** (-) indicates sale and (+) indicates purchase,

*** Total net includes net of transactions through bilateral, power exchanges and DSM

Table-30: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, JANUARY 2023				
Sr. No.	Details of REC Transactions	IEX	PXIL	HPX
A	Volume of Buy Bid	478169	111020	1250
B	Volume of Sell Bid	2603330	816959	1268
C	Ratio of Buy Bid to Sell Bid Volume	0.18	0.14	0.99
D	Market Clearing Volume (MWh)	394791	94520	1250
E	Weighted average Market Clearing Price (₹/MWh)	1000	1000	1000

Source: IEX, PXIL and HPX
Note: 1 REC = 1 MWh

Table-31: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, JANUARY 2023						
Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	0.00	232.79	232.79	-	5.62
2	Bhutan	0.00	88.01	88.01	-	3.32
	Total	0.00	320.80	320.80	-	-

Source: IEX
* Net indicates difference of volume purchased and sold by the respective neighbouring country
Note: No Cross Border transactions were recorded in DAM at PXIL and HPX



Economics Division
Central Electricity Regulatory Commission
36, Janpath, Chanderlok Building